Double Revolving Oven

MODEL DR-34

Service Manual

Serial Numbers 100482 and Higher

Warranty Information

LIMITED ONE YEAR WARRANTY

BKI (The “Company”) warrants to the original purchaser/user, that at time of shipment from the Company factory, this equipment will be free from defect in materials and workmanship. Written notice of a claim under this Warranty must be given within **ONE YEAR AND THREE MONTHS** from date of shipment from the factory. Defective conditions caused by abnormal use or misuse, lack of maintenance, damage by third parties, alterations by unauthorized personnel, acts of God, failure to follow installation instructions or any other events beyond the control of the company will **NOT** be covered under Warranty. The obligation of the Company under this Warranty shall be limited to repairing or replacing (at the option of the company) any part which is defective in reasonable opinion of the Company. The user will have the responsibility and expense of removing and returning the defective part to the Company as well as the cost of reinstalling the replacement or repaired part.

IN NO EVENT SHALL THE COMPANY BE LIABLE FOR LOSS OF USE, LOSS OF REVENUE OR LOSS OF PRODUCT OR PROFIT OR FOR INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, FOOD SPOILAGE OR PRODUCT LOSS. WARRANTY DOES NOT COVER GLASS BREAKAGE. THE ABOVE WARRANTY IS EXCLUSIVE AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE EXCLUDED INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SHALL APPLY ONLY WITHIN THE CONTINENTAL UNITED STATES, ITS TERRITORIES, AND POSSESSIONS AND IN CANADA.

LIMITED NINETY DAY LABOR WARRANTY

All labor necessary to repair or replace factory defective parts will be performed, without charge, to the end user, by service personnel of a ***BKI*** Authorized Distributor during the first ninety days after the date of installation of the new equipment.

Replacement parts: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within 90 days from date of original installation will be repaired or replaced without charge F.O.B. Factory, Simpsonville, S.C. or F.O.B. authorized distributor.

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Introduction

The Double Revolving Oven is a compact, attractive and functional unit utilizing a double revolving mechanism that ensures fast and even product cooking. It contains removable components and doors on both sides for easy accessibility, maintenance and cleaning. A touch pad controller and switches are provided to allow for quick setup and operation of the unit.

The BKI name and trademark on this unit assures you of the finest in design and engineering -- that it has been built with care and dedication -- using the best materials available. Attention to the operating instructions regarding proper installation, operation, and maintenance will result in long lasting dependability to insure the highest profitable return on your investment.

NOTICE PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING THE UNIT. If you have any questions, please contact your BKI Distributor. If they are unable to answer your questions, contact the BKI Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.

Safety Signs and Messages

The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

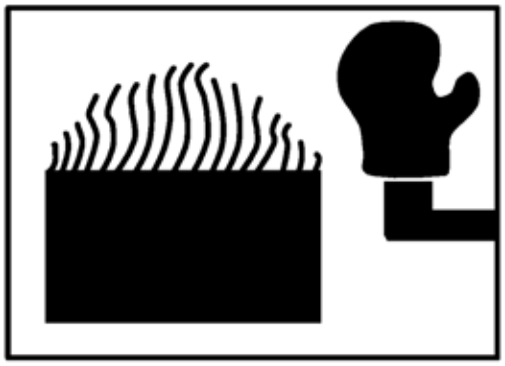
⚠DANGER This message indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠CAUTION This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.

Safe Work Practices

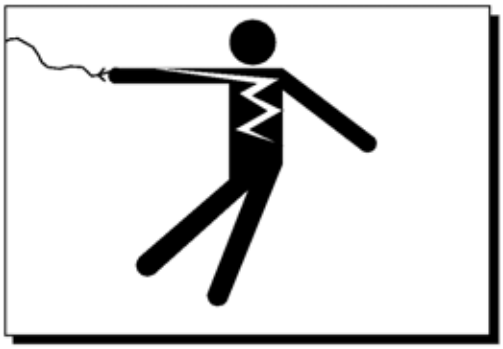


Wear Safe Clothing Appropriate To Your Job

Always wear your insulated mitts when handling hot racks or touch any hot metal surface. If you lose or damage your mitts, you can buy new ones at your local restaurant equipment supply store or from your local BKI Distributor.

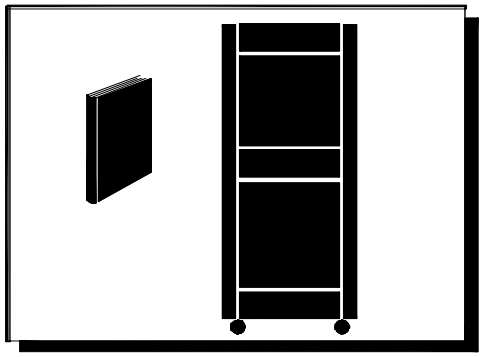
Never wear loose clothing such as neckties or scarves while operating this equipment. Keep loose hair tied back or in a hair net while operating this equipment.

Always wear appropriate personal protection equipment during the cleaning process to guard against possible injury from hot cleaning solution.



Beware of High Voltage

This equipment uses high voltage. Serious injury can occur if you or any untrained or unauthorized person installs, services, or repairs this equipment. Always use an Authorized Service agent to service your equipment.



Keep this manual with the Equipment

This manual is an important part of your equipment. Always keep it near for easy access.

If you need to replace this manual, contact:

BKI
Technical Services Department
P.O. Box 80400
Simpsonville, S.C. 29680-0400
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471

Protect Children

Keep children away from this equipment. Children may not understand that this equipment is dangerous for them and others.

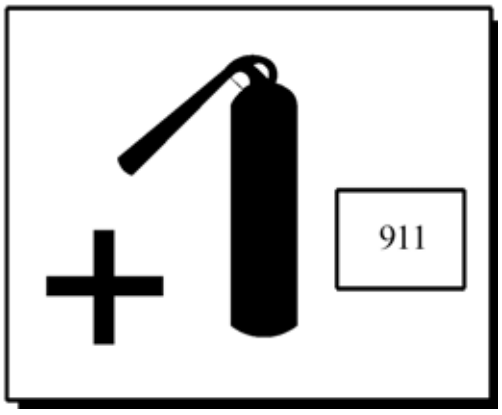
NEVER allow children to play near or operate your equipment.

Keep Safety Labels Clean and in Good Condition

Do not remove or cover any safety labels on your equipment. Keep all safety labels clean and in good condition. Replace any damaged or missing safety labels. Refer to the Safety Labels section for illustration and location of safety labels on this unit.

If you need a new safety label, obtain the number of the specific label illustrated on page 5, then contact:

BKI
Technical Services Department
P.O. Box 80400
Simpsonville, S.C. 29680-0400
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471

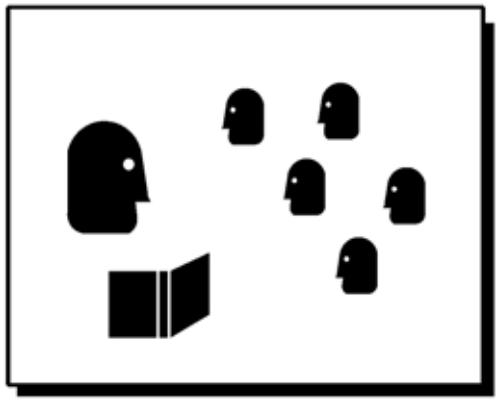


Be Prepared for Emergencies

Be prepared for fires, injuries, or other emergencies.

Keep a first aid kit and a fire extinguisher near the equipment. You must use a 40-pound Type BC fire extinguisher and keep it within 25 feet of your equipment.

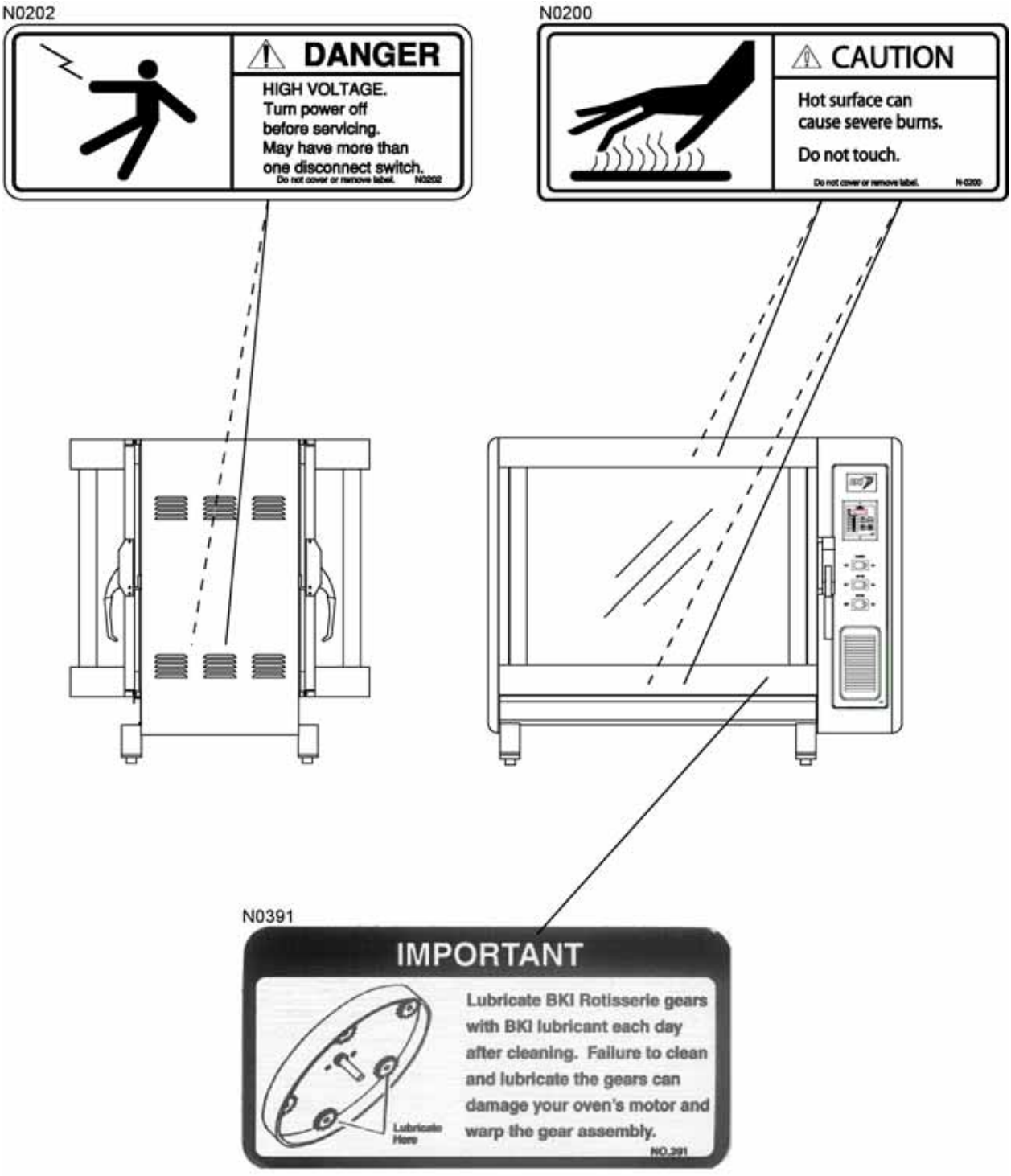
Keep emergency numbers for doctors, ambulance services, hospitals, and the fire department near your telephone.



Know your responsibilities as an Employer

- Make certain your employees know how to operate the equipment.
- Make certain your employees are aware of the safety precautions on the equipment and in this manual.
- Make certain that you have thoroughly trained your employees about operating the equipment safely.
- Make certain the equipment is in proper working condition. If you make unauthorized modifications to the equipment, you will reduce the function and safety of the equipment.

Safety Decals



Health And Sanitation Practices

BKI Rotisserie Ovens are manufactured to comply with health regulations and are tested and certified to UL®, cUL®, and NSF® standards. You must operate the equipment properly using only quality products and use meat thermometers to insure meats are thoroughly cooked.

Food Handling

- Wash hands thoroughly in warm, soapy water after handling raw poultry or meats.
- Clean and sanitize all utensils and surfaces that have been in contact with raw products. Clean and sanitize the meat forks or baskets between cooking.
- **Never** place cooked meats on the same surfaces used to prepare raw meats, unless the area has been thoroughly cleaned and sanitized.

Storage Of Raw Meats

- Designate an area or shelf strictly for the storage of all raw meats to be used in the rotisserie.
- Raw product must always be stored at temperatures below 38° F. (3° C.).
- **Never** store or mix raw foods above cooked foods, as *this is a health hazard*. The drippings from raw foods contaminate cooked or processed foods.
- All chicken and chicken parts to be stored overnight must be thoroughly iced down and refrigerated.

Coding Cooked Foods

All products cooked during the day should be sold the same day.

NOTE: It is not the intent of the rotisserie program to have unsold merchandise at the end of the cooking day. Follow your company's procedures for the handling of any leftover product.

Storage Of Prepared Foods

- Cold foods should be kept at or below 38° F. (3° C.).
- Hot foods must be maintained to meet local health codes, usually a minimum 145° F. (63° C.).

Installation

WARNING Serious injury, equipment damage or death could result if attempting to install this oven yourself. Ensure that an authorized BKI service agent install the oven.

Unpacking and Handling

It is the owners' responsibility to file all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage to cartons or crates is found, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

If damage is found when the equipment is opened, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your shipment. Ask for an immediate inspection of your concealed damage item. Packaging material **MUST** be retained to show the inspector from the truck line.

Remove all packing from the interior and exterior of the oven.

Location and Clearance

Place the oven no less than 10.5" (26.7 cm.) to combustible surfaces at the rear of the machine, and 1" (2.54 cm.) on the sides.

Wiring

WARNING Electrocution, equipment failure or property damage could result if an unlicensed electrician performs the electrical installation. Ensure that a licensed electrician perform the electrical installation in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI NFPA 70-20XX.

This unit, when installed by an authorized BKI service agent, must be wired for use in accordance with all applicable local, state, and federal codes. For specific electrical requirements and connections refer to the wiring diagram attached to the unit or provided in the Service Manual.

Replacement Parts

Use the information in this section to identify replacement parts. To order replacement parts, call your local BKI sales and service representative. Before calling, please note the serial number on the rating tag affixed to the unit.

Assemblies

Description	Assembly #	Figure #	Table #
BEARING REPLACEMENT KIT	AN9513560S	Figure 1	Table 1
CONTROLLER W/ DECAL, 300° F	AN9514390S	Figure 2	Table 2
CONTROLLER W/ DECAL, 325° F	AN9513280S	Figure 2	Table 2
CONTROLLER W/ DECAL, CELSIUS	AN9514850S	Figure 2	Table 2
COOLING FAN	AB95148400	Figure 3	Table 3
MOTOR PLATE (208V)	AB95148000	Figure 4	Table 4
DOOR, CUSTOMER SIDE	AC95124900	Figure 5	Table 5
DOOR, OPERATOR SIDE	AC95124600	Figure 6	Table 6
DRIVE ROTOR	AB95147500	Figure 7	Table 7
MOTOR PLATE (220-240V)	AB95148100	Figure 8	Table 8
ROTOR/SHAFT	AN9514780S	Figure 9	Table 9

Figure 1. *Bearing Replacement Kit*

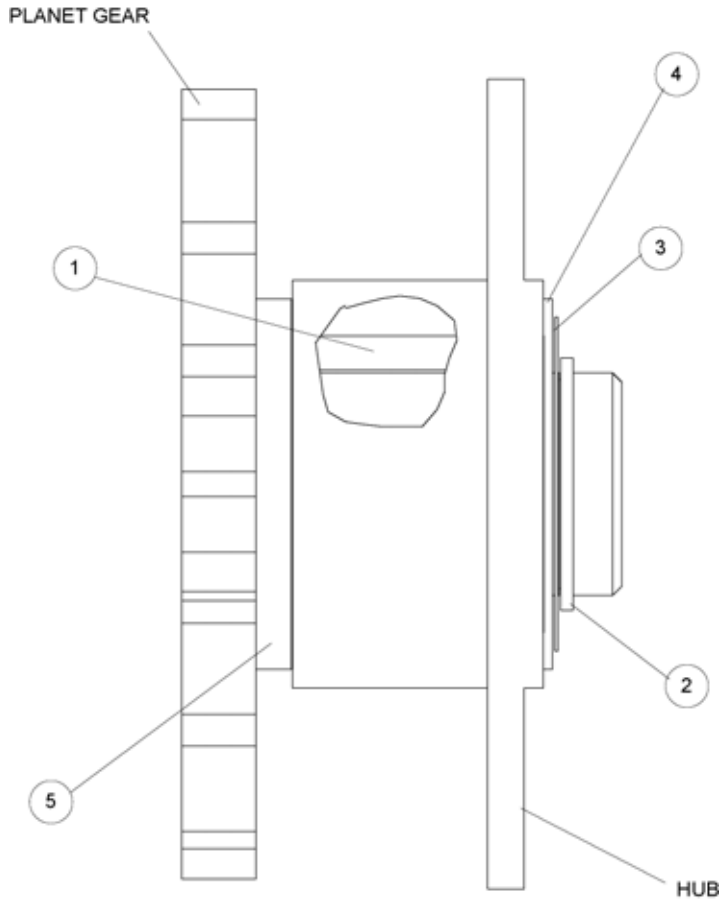


Table 1. *Bearing Replacement Kit Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	B0241	5	BEARING, .75 ID X 1. OD .813 L
2	FT0366	5	RETAINING RING, PLANETARY GEAR
3	FT0367	5	SHIM, PLANETARY GEAR DR34
4	WSH256	5	WASHER, THRUST .765ID X 1.25OD
5	WSH257	5	WASHER, THRUST .765ID X 1.25OD

Figure 2. *Controller w/ Decal*

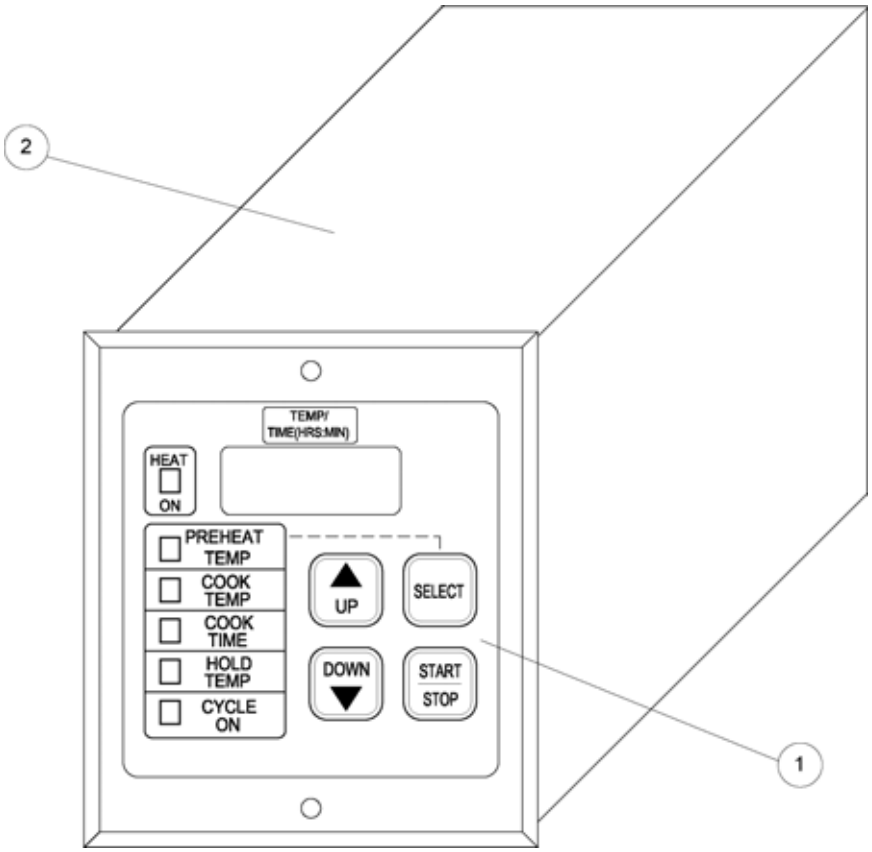


Table 2. *Controller w/ Decal Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	N0274	1	DECAL, DR34 CONTROLLER
2	CP0028* *OR* CP0020* *OR* CP0026	1	CONTROLLER, 300° F *OR* CONTROLLER, 325° F *OR* CONTROLLER, CELSIUS

** - These units can be converted in the field to read the temperature in degrees Celsius. Please contact BKI Technical Services for instructions.*

Figure 3. *Cooling Fan*

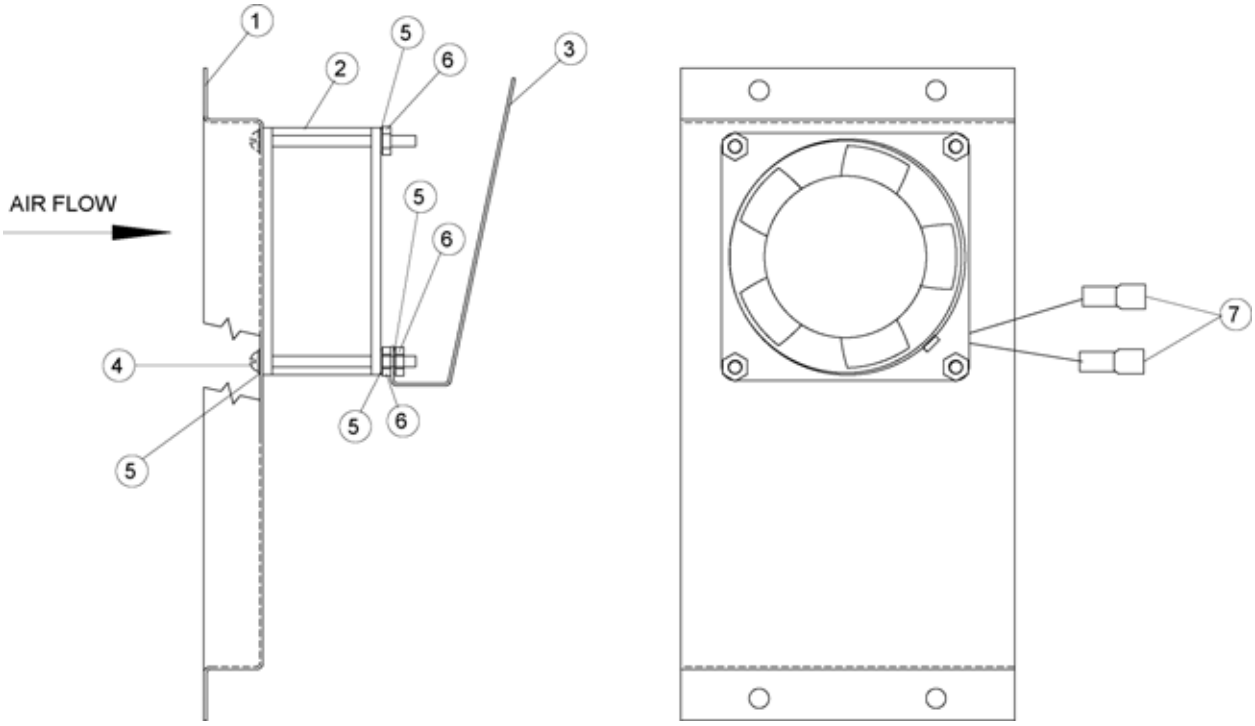


Table 3. *Cooling Fan Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	FB95126202	1	FAN PLENUM, DR
2	FN0014	1	FAN, 230V NMB 3115FS23WB30
3	FA95129702	1	AIR DEFLECTOR, DR
4	SCR315	4	SCREW, 6-32 X 2 RD HD SLTD
5	WSH089	10	WASHER, #6 INT LOCK ZINC PLATED
6	NUT048	6	NUT, 6-32 HEX ZINC PLTD
7	F0243	3	TERMINAL, 1/4" QUICK CONNECT

Figure 4. *Motor Plate (208V)*

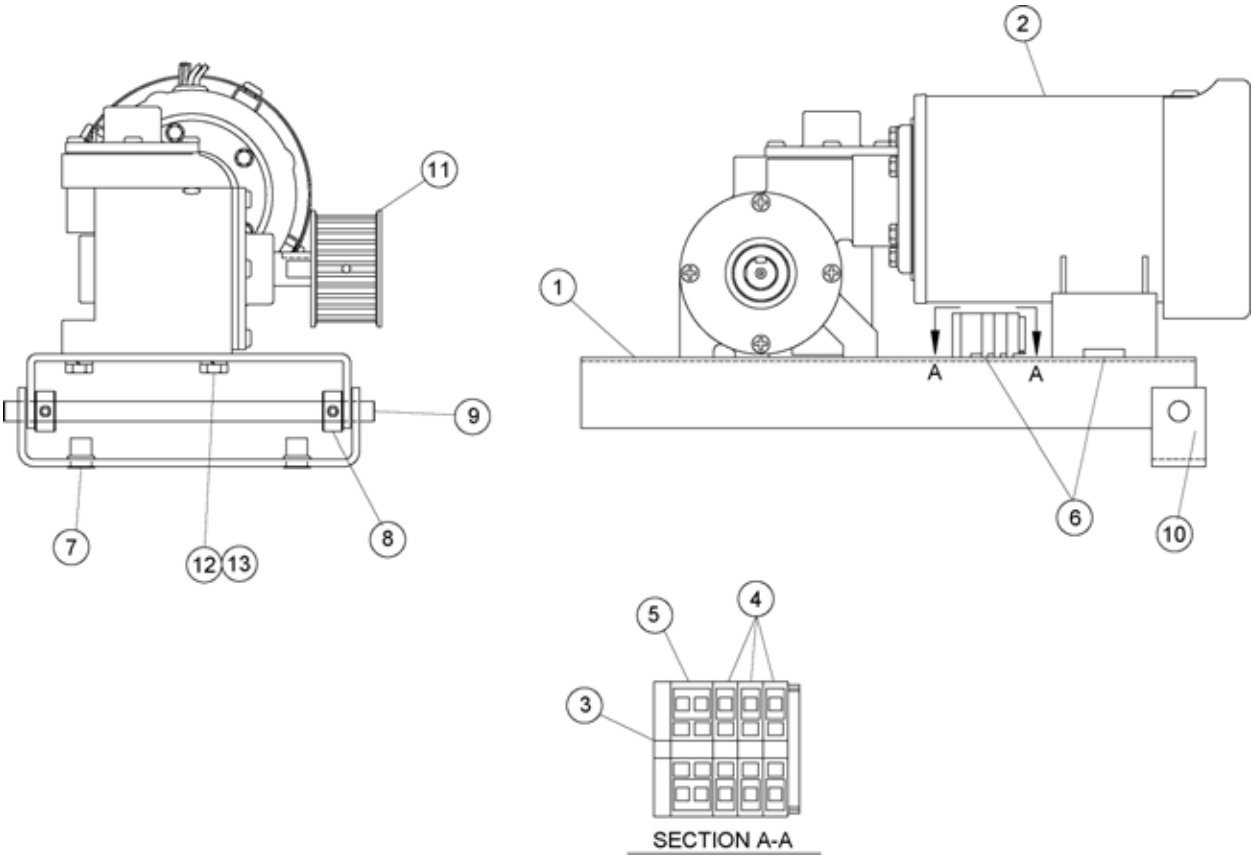


Table 4. *Motor Plate (208V) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	PN95147900	1	MOTOR MOUNT PLATE PAINTED
2	M0086	1	MOTOR, 208V .48/.5A BALDOR
3	TB0068	1	TERM BLOCK END PLATE
4	TB0066	3	TERM BLOCK 2 CONDUCTOR CTR
5	TB0064	1	TERM BLOCK 4 CONDUCTOR CTR
6	TP0037	0.25	TAPE, 7/8 DBL SIDE 3M6381 WHITE
7	F0079	2	THREAD INSERT 1/4-20 STEEL
8	FT0032	2	COLLAR, 3/8" LSC-6 RB
9	MA95124402	1	MOTOR MOUNT HINGE PIN, DR
10	PN95124300	1	DR MOTOR MOUNT CHANNEL HINGE
11	S0129	1	SPROCKET, FLGD,H32-5M-25,.625
12	SCR058	4	SCREW, 1/4-20 X 1/2 HEX CAP
13	WSH044	4	WASHER, 1/4 LOCK ZINC PLTD

Figure 5. *Customer Side Door*

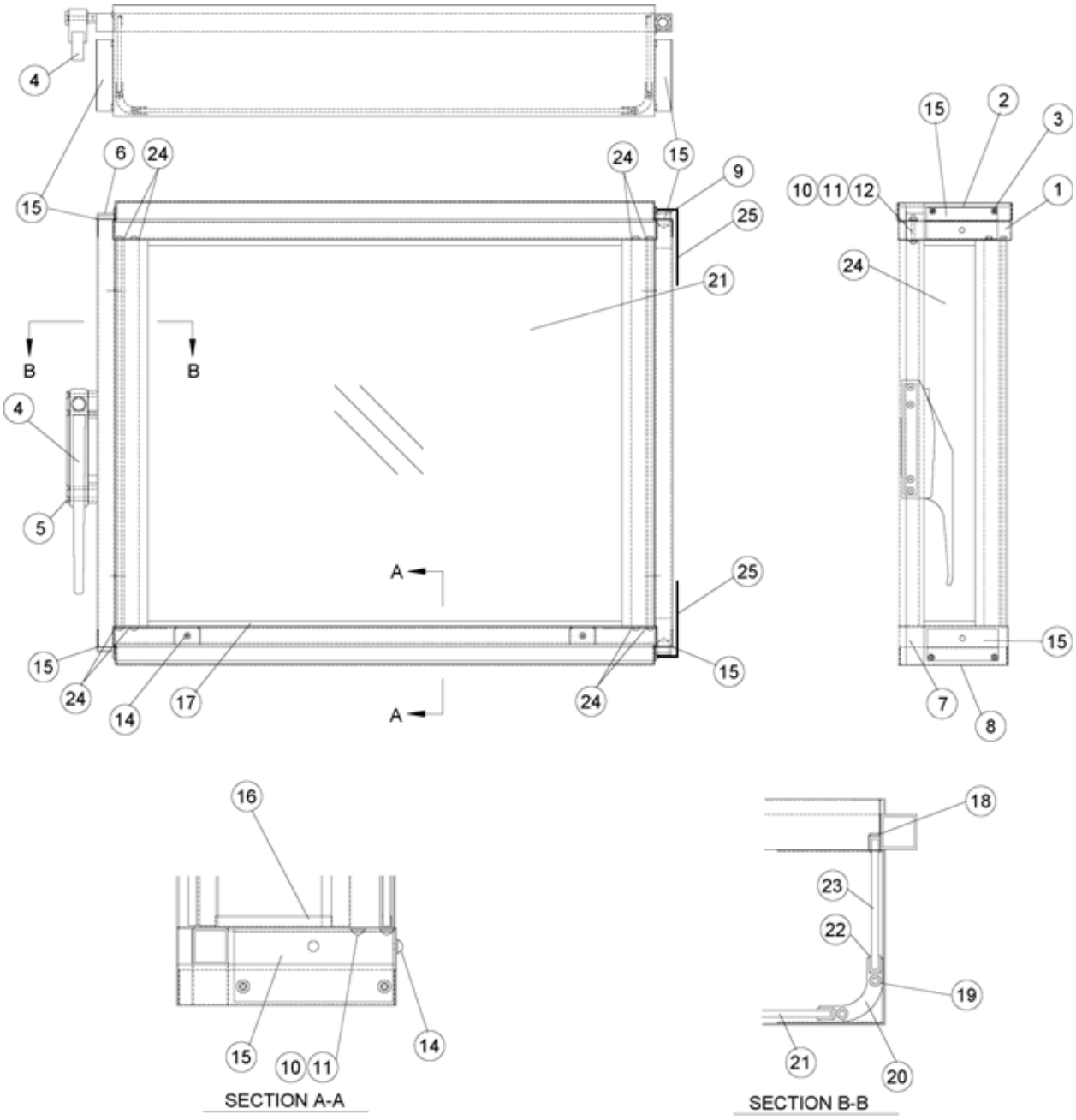


Table 5. *Customer Side Door Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	WB95121000	1	DOOR TOP WELD DR
2	WB95122300	1	DOOR TOP COVER WELD, DR
3	SCR138	8	SCREW, 10 X 1/2 PHIL TR HD
4	L0103	1	LATCH, MAGNETIC COMPOSITE
5	SCR390	4	SCREW, 10-24 X 1-1/2 SOC FLAT HD
6	WC95122900	1	DOOR FRAME WELD, CUST DR-34
7	WB95122100	1	DOOR BOTTOM WELDMENT DR
8	FB95122203	1	DOOR BOTTOM COVER DR
9	B0231	2	BEARING, BRONZE W/ FLANGE
10	SCR030	8	SCREW, 10-24 X 1/2 PHIL RD HD
11	WSH093	2	WASHER, #10 LOCK
12	SCR160	2	SCREW, 10-24 X 1 1/2 SLTD RD
13	NUT131	2	NUT, 10-24 SS 18-8 HEX
14	SCR316	2	SCREW, 10-24 X 1/2 SELF TAP
15	FB95133003	4	MTG BRACKET, DR DOOR FRAME
16	MA95124700	4	DOOR SIDE GLASS TRIM, DR
17	MA95124800	2	DOOR FRONT GLASS TRIM, DR
18	FB95120903	2	DOOR TRIM, DR
19	SCR359	8	SCREW, 10 X 1/2 TYPE B PHIL
20	EA0067	2	EXTRUSION, DOOR 21.562 DR
21	GL0176	1	GLASS, 21 13/32 X 27 13/32
22	GT0004	6	GASKET, LG. U BLACK
23	GL0194	2	GLASS, SIDE DOOR DR34
24	WSH091	8	WASHER, 3/16 FLAT
25	H0069	2	HINGE, DOOR DR

Figure 6. *Operator Side Door*

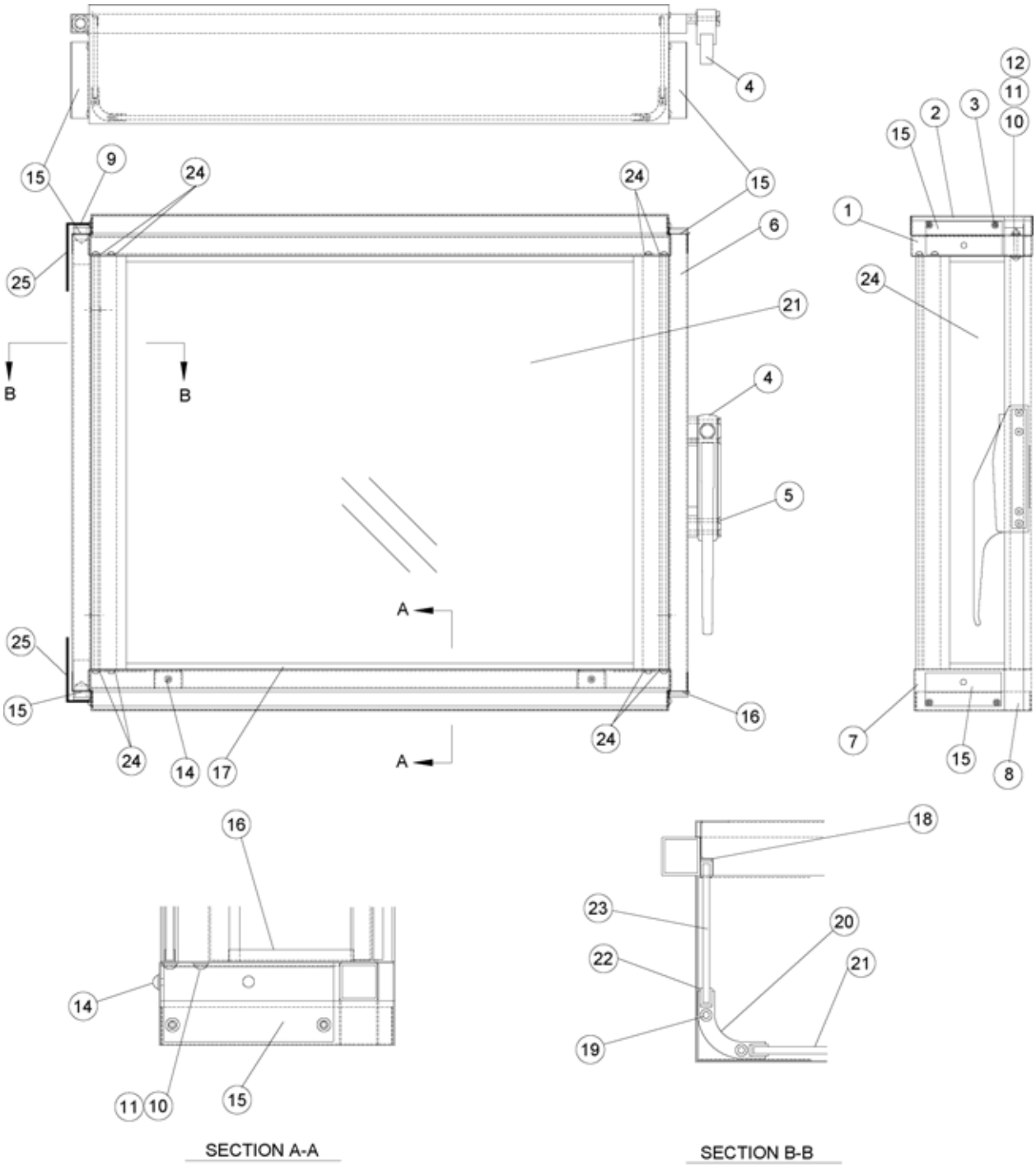


Table 6. *Operator Side Door Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	WB95121000	1	DOOR TOP WELD DR
2	WB95122300	1	DOOR TOP COVER WELD, DR
3	SCR138	8	SCREW, 10 X 1/2 PHIL TR HD
4	L0103	1	LATCH, MAGNETIC COMPOSITE
5	SCR390	4	SCREW, 10-24 X 1-1/2 SOC FLAT HD
6	WC95123500	1	DOOR FRAME WELD OPER DR34
7	WB95122100	1	DOOR BOTTOM WELDMENT DR
8	FB95122203	1	DOOR BOTTOM COVER DR
9	B0231	2	BEARING, BRONZE W/ FLANGE
10	SCR030	8	SCREW, 10-24 X 1/2 PHIL RD HD
11	WSH093	2	WASHER, #10 LOCK
12	SCR160	2	SCREW, 10-24 X 1 1/2 SLTD RD
13	NUT131	2	NUT, 10-24 SS 18-8 HEX
14	SCR316	2	SCREW, 10-24 X 1/2 SELF TAP
15	FB95133003	4	MTG BRACKET, DR DOOR FRAME
16	MA95124700	4	DOOR SIDE GLASS TRIM, DR
17	MA95124800	2	DOOR FRONT GLASS TRIM, DR
18	FB95120903	2	DOOR TRIM, DR
19	SCR359	8	SCREW, 10 X 1/2 TYPE B PHIL
20	EA0067	2	EXTRUSION, DOOR 21.562 DR
21	GL0276	1	GLASS, W/HEAT BARRIER DR34
22	GT0004	11	GASKET, LG. U BLACK
23	GL0194	2	GLASS, SIDE DOOR DR34
24	WSH091	8	WASHER, 3/16 FLAT
25	H0069	2	HINGE, DOOR DR

Figure 7. *Drive Rotor*

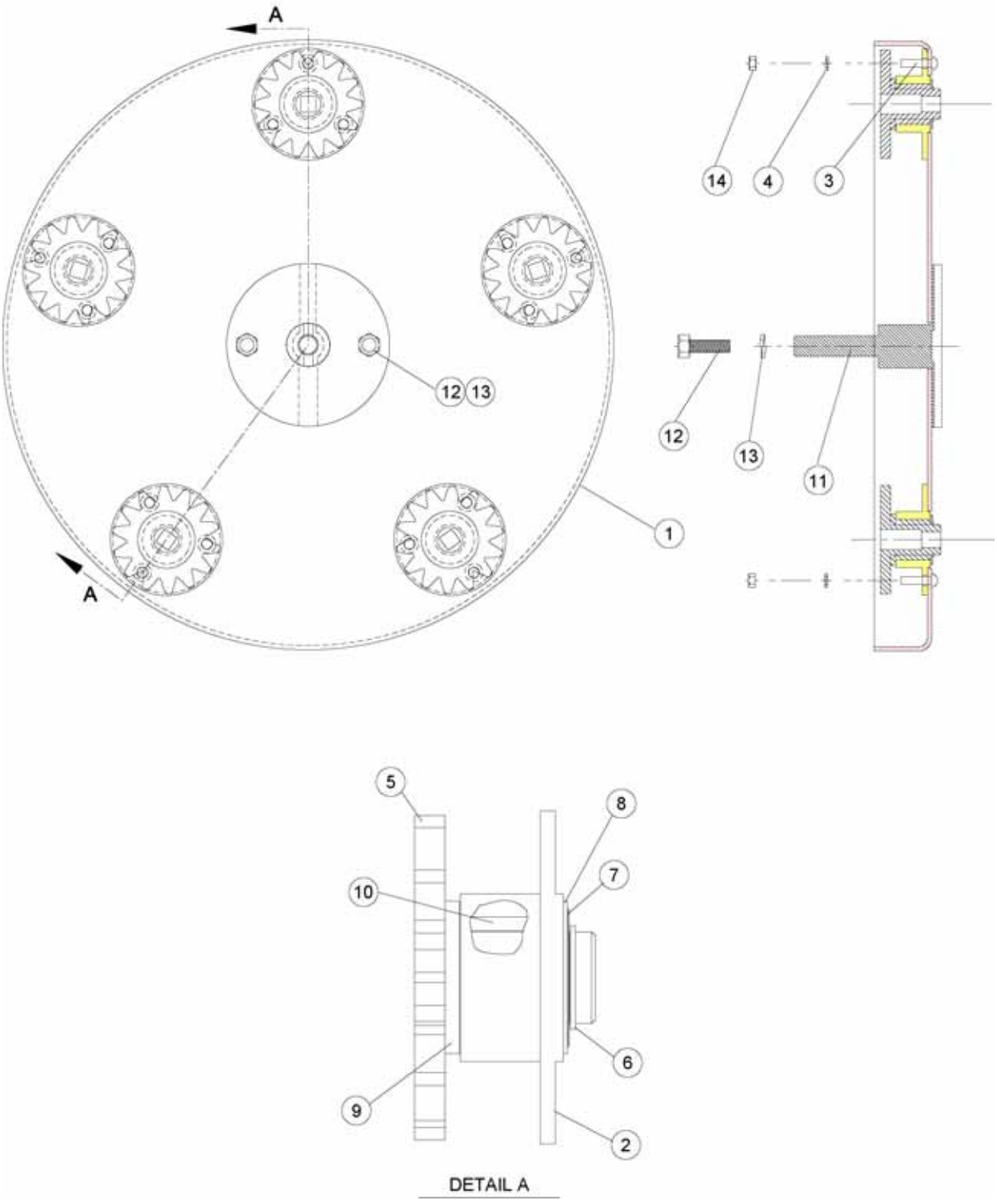


Table 7. *Drive Rotor Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	RO0029	1	ROTOR, DRIVE SPINNING DR34
2	H0067	5	HUB, PLANETARY GEAR 951
3	SCR411	15	SCREW, 10-24 X 1/2 PHIL RD HD
4	WSH093	15	WASHER, #10 LOCK
5	G0103	5	GEAR, PLANETARY(5) 6 DIA PITCH
6	FT0366	5	RETAINING RING, PLANETARY GEAR
7	FT0367	5	SHIM, PLANETARY GEAR DR34
8	WSH256	5	WASHER, THRUST .765ID X 1.25OD
9	WSH257	5	WASHER, THRUST .765ID X 1.25OD
10	B0241	5	BEARING, .75 ID X 1. OD .813 L
11	FC0002	1	COUPLING, FEMALE 4" 951
12	SCR384	2	SCREW, 5/16-18 X 1/2 S/S HEX
13	WSH260	2	WASHER, 5/16 S/S LOCKWASHER
14	NUT131	15	NUT, 10-24 SS 18-8 HEX

Figure 8. *Motor Plate (220-240V)*

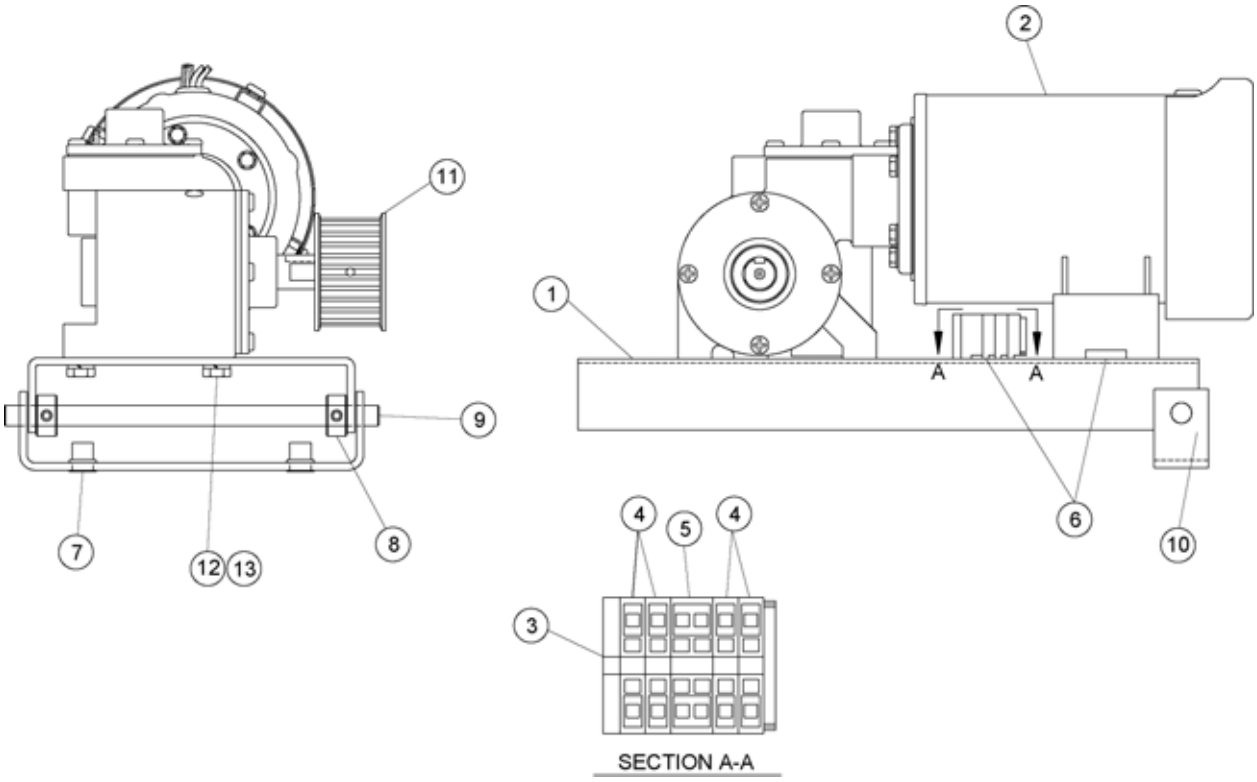


Table 8. *Motor Plate (220-240V) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	PN95147900	1	MOTOR MOUNT PLATE PAINTED
2	M0087	1	MOTOR, 110-120/220-240 .94/.55 AMP
3	TB0068	1	TERM BLOCK END PLATE
4	TB0066	4	TERM BLOCK 2 CONDUCTOR CTR
5	TB0064	1	TERM BLOCK 4 CONDUCTOR CTR
6	TP0037	0.25	TAPE, 7/8 DBL SIDE 3M6381 WHITE
7	F0079	2	THREAD INSERT 1/4-20 STEEL
8	FT0032	2	COLLAR, 3/8" LSC-6 RB
9	MA95124402	1	MOTOR MOUNT HINGE PIN, DR
10	PN95124300	1	DR MOTOR MOUNT CHANNEL HINGE
11	S0129	1	SPROCKET, FLGD,H32-5M-25,.625
12	SCR058	4	SCREW, 1/4-20 X 1/2 HEX CAP
13	WSH044	4	WASHER, 1/4 LOCK ZINC PLTD

Figure 9. *Rotor/Shaft*

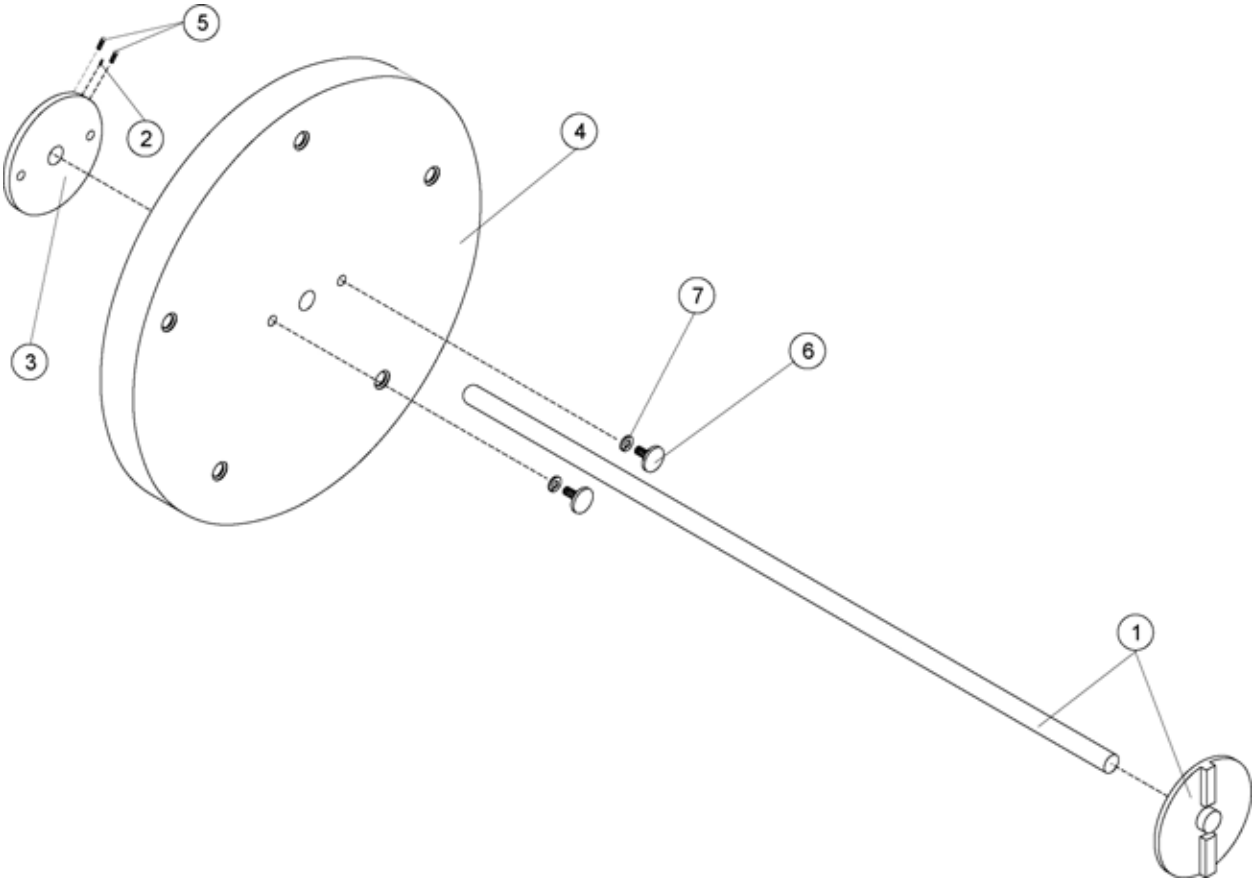


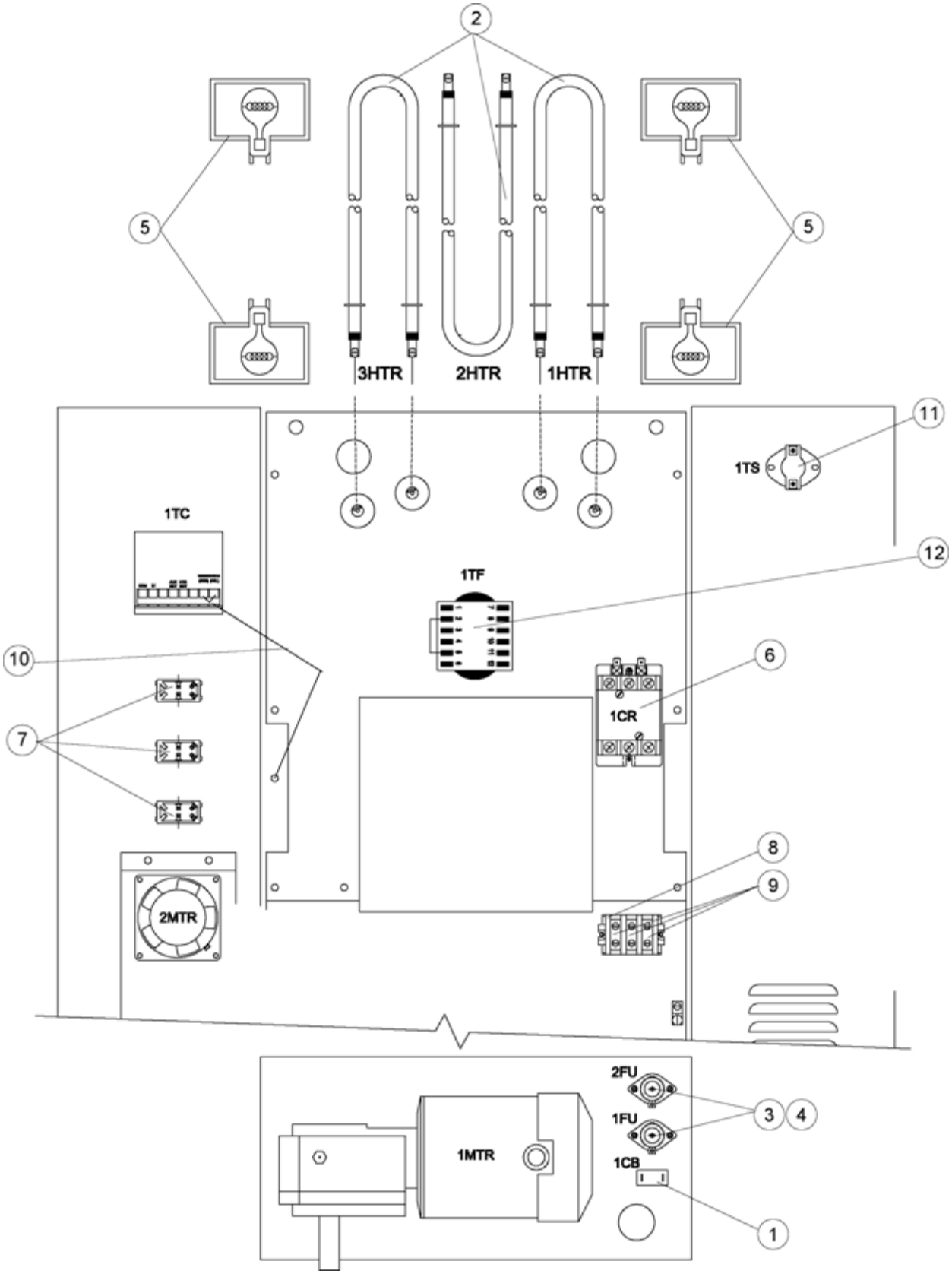
Table 9. *Rotor/Shaft Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	AN95132900	1	ROTOR SHAFT/MALE CPLG DR
2	F0077	1	ROLL PIN, 5/32 X 1 1/8
3	H0068	1	HUB, ROTOR 4" DIA 951
4	RO0030	1	ROTOR, PASSIVE SPINNING DR
5	SCR364	2	SCREW, 1/4-20 X 1/4 SOC SET
6	SCR384	2	SCREW, 5/16-18 X 1/2 S/S HEX
7	WSH045	2	WASHER, 5/16 LOCK ZINC PLTD

Electrical Components

Description	Component #	Figure #	Item #
BREAKER, CIRCUIT .6 AMP 250V	CB0059	10	1
CALROD, 208V 2000W *OR* CALROD, 240V 2000W	C0290 *OR* C0291	10	2
FUSE HOLDER, 15A 300V HPF-EE	FH0001	10	3
FUSE, 15A 300V SC15 TIME DELAY	F0097	10	4
LAMPHOLDER W/BULB 12V 20W (OSRAM) LENS, REPLACEMENT FOR LH0024 LAMP BULB, 20W 12V G4HALOGEN OSRAM 66428	LH0024 LN0001 B0562	10	5
RELAY, 3 POLE 42CF35AG	R0148	10	6
SWITCH, DPST 15A RED LITE 250V	S0111	10	7
TERM BLOCK END SECTION	TB0002	10	8
TERM BLOCK MDM10/3 70A 600V *OR* TERM BLOCK MDM10/4 70A 600V	TB0081 *OR* TB0082	10	9
THERMOCOUPLE, TYPE K T-2016	T0085	10	10
THERMOSTAT, HI LIMIT 2E253B	T0057	10	11
TRANSFORMER, 115/230 PRI 80VA	TF0043	10	12

Figure 10. *Electrical Components*

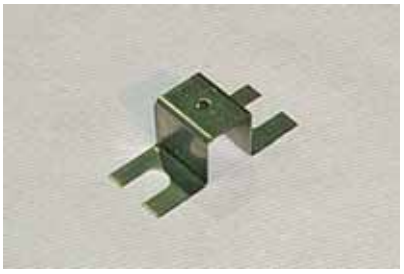


Mechanical Components

Description	Component #	Figure #	Item #
BELT, SYNCHRONOUS 985-5M-25	B0502	11	1
INNER CENTER ELEMENT BRACKET	FB95128102	11	2
OUTER CENTER ELEMENT BRACKET	FB95128002	11	3
CALROD RETAINER	FB95116302	11	4
CLIP, SUN GEAR RETAINING	LZ0005	11	5
GREASE DRAWER WELDMENT	WB95125800	11	6
GASKET, DOOR HANDLE	G0314	11	7
GEAR, SUN 951 57 TEETH	G0102	11	8
GUARD, DR34 DOOR TRIM	G0104	11	9
HUB, ROTOR 4" DIA 951	H0068	11	10
BRACKET, CALROD HOLDER AND BRACKET	B0459B	11	11
LEG, INSERT TYPE FOR 2" TUBE	L0045	11	12
PROBE GUARD	FA95128202	11	13
ROTOR SHIM	FA95134202	11	14
SCREW, 10-24 X 3/4 KNURLED BRT	SCR121	11	15
SHAFT SEAT	FT0391	11	16
SPROCKET, UNFLGD,MTO H96-5M-25	S0130	11	17
TERM BLOCK 6H12-TSCU-F	TB0001	11	18
TERM BLOCK, 1 POLE CERAMIC	F0358	11	19
TERMINAL GROUNDING LUG	F0111	11	20
PAN, BOTTOM	FB95103303	11	21

Figure 11. *Mechanical Components*

1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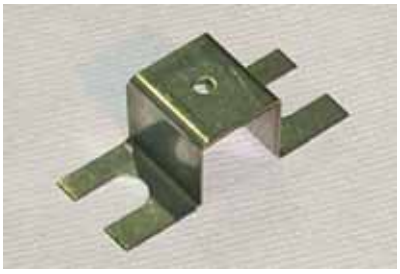
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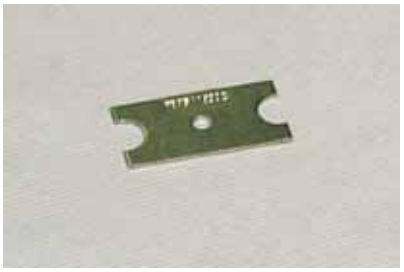
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5

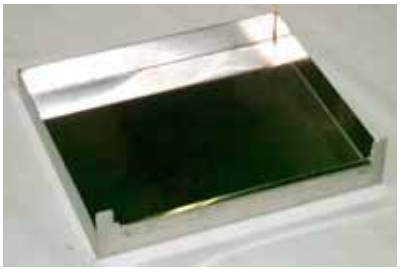

6

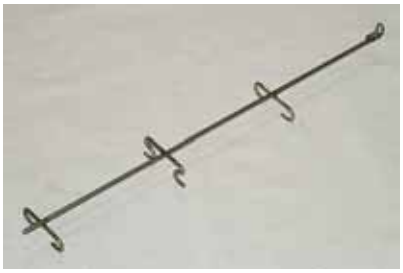
Figure 11. *Mechanical Components - Continued*

7

8

9

10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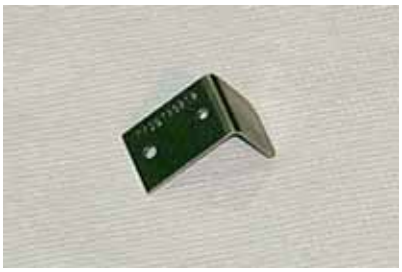
12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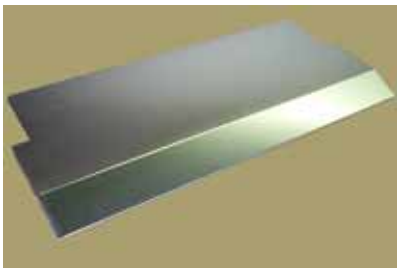
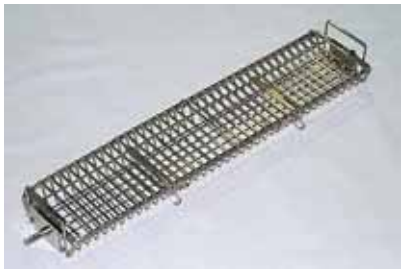

21

Accessories

Description	Accessory #	Figure #	Item #
BASKET, MEAT LARGE CLAMSHELL	MB0015	12	1
BASKET, MEAT SM CLAMSHELL	MB0011	12	2
INSULATED MITT 13"	G0052	12	3
MEAT FORK ASSY	SB9536	12	4
MEAT FORK ASSY, TURKEY	SB9537	12	5
VEE SPIT 26.563"	MF0021	12	6

Figure 12. *Accessories*

1


2

3

4

5

6

Wiring Diagrams

Refer to the table below to find the wiring diagram associated with your unit.

Wiring Diagram	Figure #	Page #
220V, 240V, 208V, 3 Phase	Figure 13	28
240/415V, 220/380V, 3 Phase	Figure 14	30
220V, 240V, 208V, 1 Phase	Figure 15	32
240/415V, 220/380V, 1 Phase	Figure 16	34

Figure 13. *220V, 240V, 208V, 3 Phase (Sheet 1 of 2)*

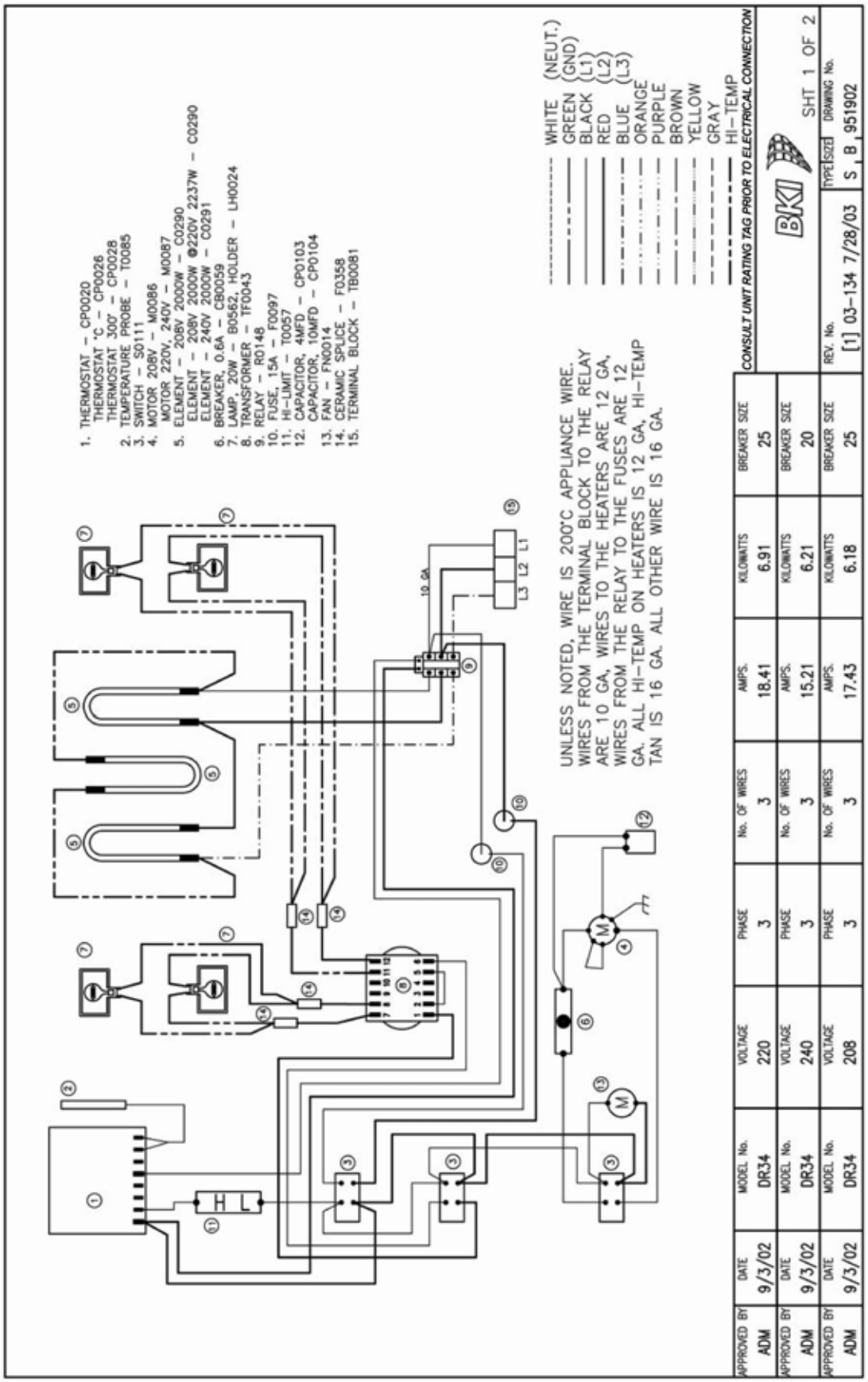

1. THERMOSTAT – CP0020
THERMOSTAT °C – CP0026
THERMOSTAT 300° – CP0028
2. TEMPERATURE PROBE – T0085
3. SWITCH – S0111
4. MOTOR 208V – M0086
MOTOR 220V, 240V – M0087
5. ELEMENT – 208V 2000W – C0290
ELEMENT – 208V 2000W @220V 2237W – C0290
ELEMENT – 240V 2000W – C0291
6. BREAKER, 0.6A – CB0059
7. LAMP, 20W – B0562, HOLDER – LH0024
8. TRANSFORMER – TF0043
9. RELAY – R0148
10. FUSE, 15A – F0097
11. HI–LIMIT – T0057
12. CAPACITOR, 4MFD – CP0103
CAPACITOR, 10MFD – CP0104
13. FAN – FN0014
14. CERAMIC SPLICE – F0358
15. TERMINAL BLOCK – TB0081
UNLESS NOTED, WIRE IS 200°C APPLIANCE WIRE.
WIRES FROM THE TERMINAL BLOCK TO THE RELAY ARE 10 GA, WIRES TO THE HEATERS ARE 12 GA, WIRES FROM THE RELAY TO THE FUSES ARE 12 GA. ALL HI–TEMP ON HEATERS IS 12 GA, HI–TEMP TAN IS 16 GA. ALL OTHER WIRE IS 16 GA.
WHITE (NEUT.)
GREEN (GND)
BLACK (L1)
RED (L2)
BLUE (L3)
ORANGE
PURPLE
BROWN
YELLOW
GRAY
HI–TEMP
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
BKI
SHT 1 OF 2
REV. No. [1] 03–134 7/28/03
TYPE S
SIZE B
DRAWING No. S_B_951902
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 220 PHASE 3 No. OF WIRES 3 AMPS. 18.41 KILOWATTS 6.91 BREAKER SIZE 25
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 240 PHASE 3 No. OF WIRES 3 AMPS. 15.21 KILOWATTS 6.21 BREAKER SIZE 20
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 208 PHASE 3 No. OF WIRES 3 AMPS. 17.43 KILOWATTS 6.18 BREAKER SIZE 25

Figure 13. *220V, 240V, 208V, 3 Phase (Sheet 2 of 2)*

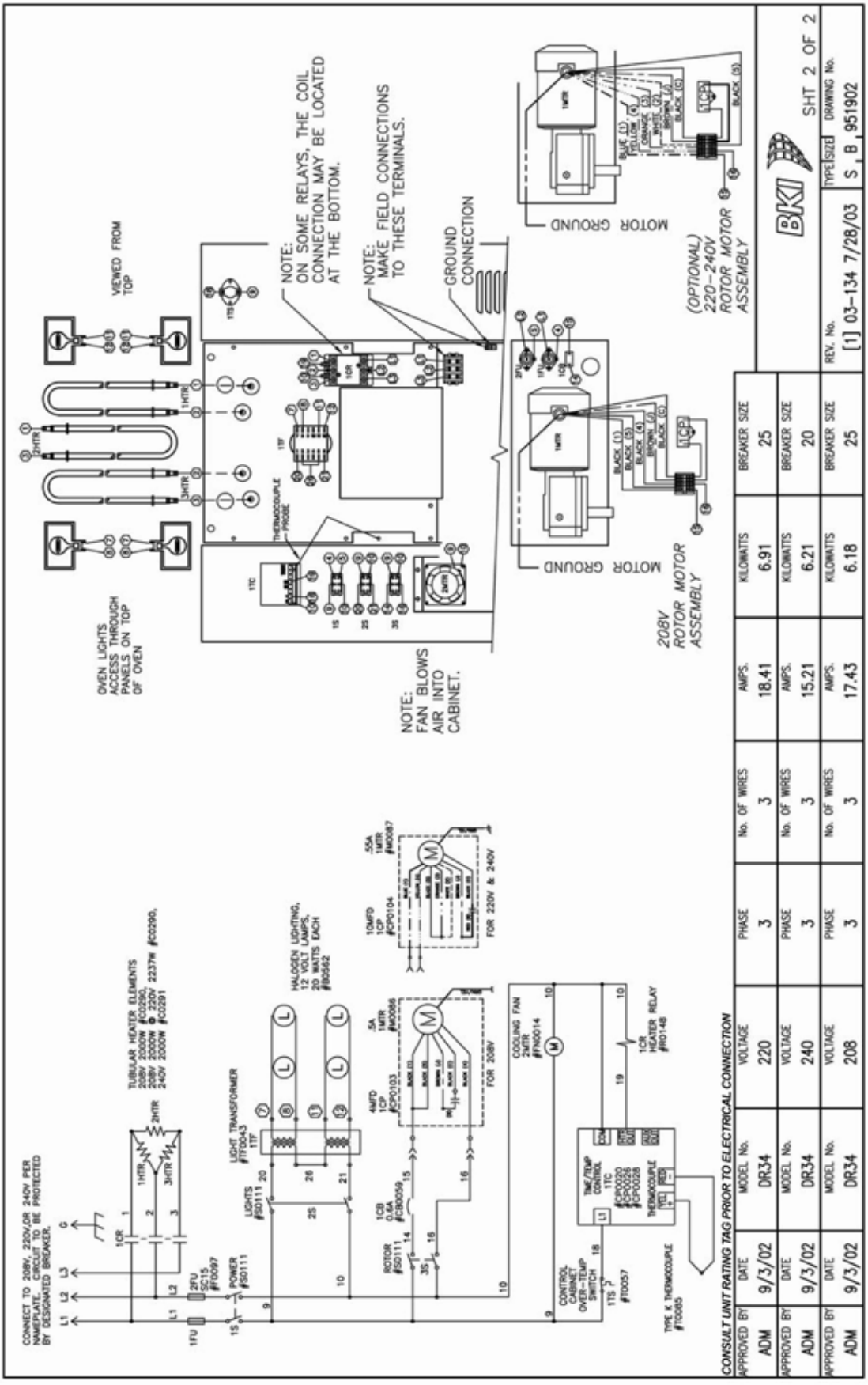

CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 220 PHASE 3 No. OF WIRES 3 AMPS. 18.41 KILOWATTS 6.91 BREAKER SIZE 25
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 240 PHASE 3 No. OF WIRES 3 AMPS. 15.21 KILOWATTS 6.21 BREAKER SIZE 20
APPROVED BY ADM DATE 9/3/02 MODEL No. DR34 VOLTAGE 208 PHASE 3 No. OF WIRES 3 AMPS. 17.43 KILOWATTS 6.18 BREAKER SIZE 25
REV. No. [1] 03-134 7/28/03
TYPE SIZE DRAWING No. S B 951902
SHT 2 OF 2
BKI
CONNECT TO 208V, 220V, OR 240V PER NAMEPLATE. CIRCUIT TO BE PROTECTED BY DESIGNATED BREAKER.
TUBULAR HEATER ELEMENTS 208V 2000W #C0290, 220V 2237W #C0290, 208V 2000W @ 220V 240V 2000W #C0291
HALOGEN LIGHTING, 12 VOLT LAMPS, 20 WATTS EACH #B0562
LIGHT TRANSFORMER #T0043
LIGHTS #S0111
POWER #S0111
ROTOR #S0111
1CB 0.6A #CB00059
4MFD 1CP #CP0103
.5A 1MTR #M0086
10MFD 1CP #CP0104
.55A 1MTR #M0087
FOR 208V
FOR 220V & 240V
COOLING FAN 2MTR #FN0014
CONTROL CABINET OVER-TEMP SWITCH 1TS #T0057
TIME/TEMP CONTROL 1TC #CP0027 #CP0026 #CP0028
THERMOCOUPLE
TYPE K THERMOCOUPLE #T0085
1CR HEATER RELAY #R0148
2FU SC15 #F0097
1FU
VIEWED FROM TOP
OVEN LIGHTS ACCESS THROUGH PANELS ON TOP OF OVEN
NOTE: ON SOME RELAYS, THE COIL CONNECTION MAY BE LOCATED AT THE BOTTOM.
NOTE: MAKE FIELD CONNECTIONS TO THESE TERMINALS.
GROUND CONNECTION
NOTE: FAN BLOWS AIR INTO CABINET.
208V ROTOR MOTOR ASSEMBLY
(OPTIONAL) 220-240V ROTOR MOTOR ASSEMBLY
MOTOR GROUND
THERMOCOUPLE PROBE
1HTR
2HTR
3HTR
1TF
1TC
1CR
2PL
1PL
1CP
1MTR
BLUE (1)
YELLOW (4)
ORANGE (3)
WHITE (2)
BROWN (J)
BLACK (C)
BLACK (5)
BLACK (1)
BLACK (4)
BLACK (3)

Figure 14. *240/415V, 220/380V, 3 Phase (Sheet 1 of 2)*

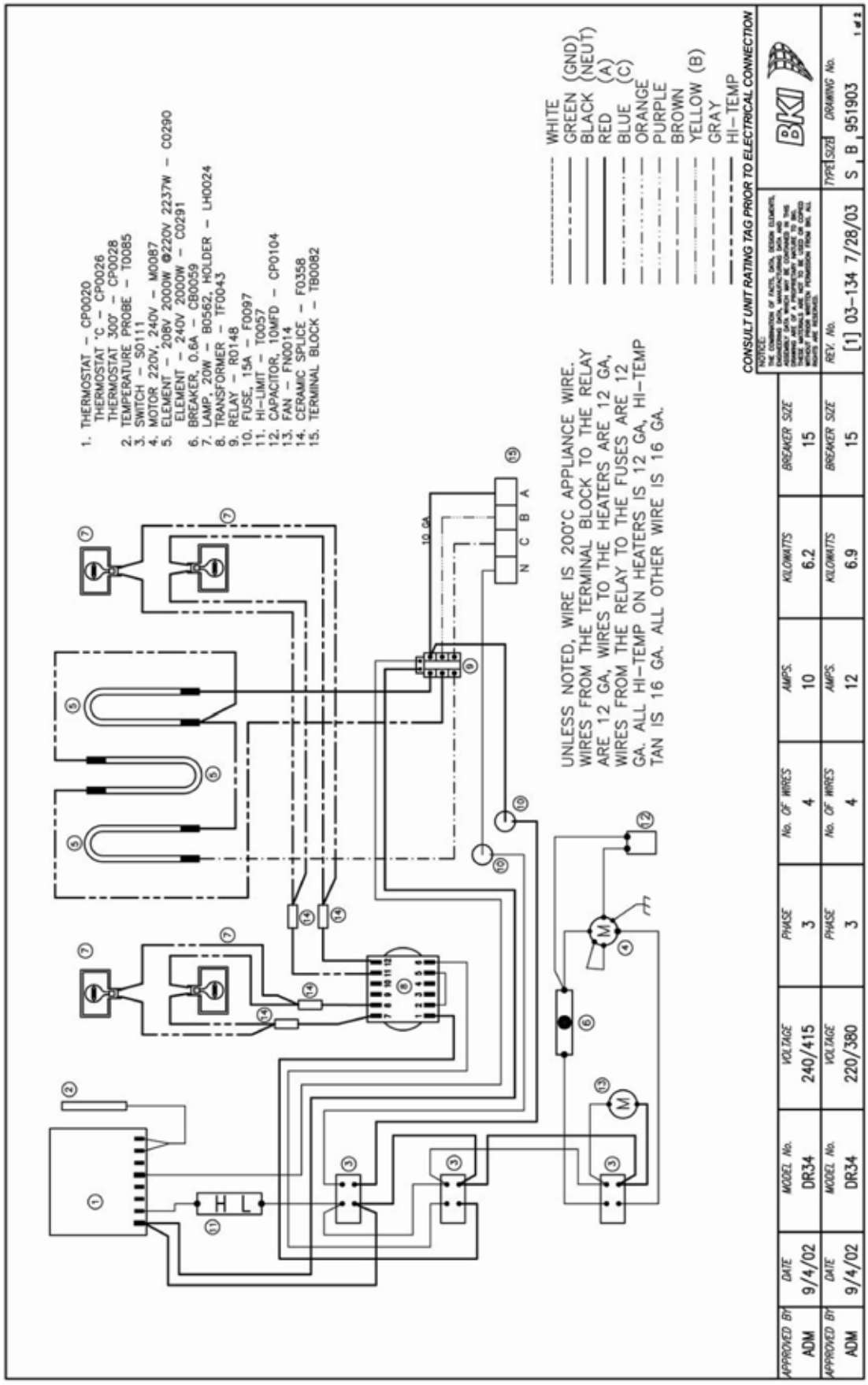

1. THERMOSTAT – CP0020
THERMOSTAT °C – CP0026
THERMOSTAT 300° – CP0028
2. TEMPERATURE PROBE – T0085
3. SWITCH – S0111
4. MOTOR 220V, 240V – M0087
5. ELEMENT – 208V 2000W @220V 2237W – C0290
ELEMENT – 240V 2000W – C0291
6. BREAKER, 0.6A – CB0059
7. LAMP, 20W – B0562, HOLDER – LH0024
8. TRANSFORMER – TF0043
9. RELAY – R0148
10. FUSE, 15A – F0097
11. HI–LIMIT – T0057
12. CAPACITOR, 10MFD – CP0104
13. FAN – FN0014
14. CERAMIC SPLICE – F0358
15. TERMINAL BLOCK – TB0082
WHITE
GREEN (GND)
BLACK (NEUT)
RED (A)
BLUE (C)
ORANGE
PURPLE
BROWN
YELLOW (B)
GRAY
HI–TEMP
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
UNLESS NOTED, WIRE IS 200°C APPLIANCE WIRE. WIRES FROM THE TERMINAL BLOCK TO THE RELAY ARE 12 GA, WIRES TO THE HEATERS ARE 12 GA, WIRES FROM THE RELAY TO THE FUSES ARE 12 GA. ALL HI–TEMP ON HEATERS IS 12 GA, HI–TEMP TAN IS 16 GA. ALL OTHER WIRE IS 16 GA.
10 GA
N C B A
H L
APPROVED BY ADM DATE 9/4/02 MODEL No. DR34 VOLTAGE 240/415 PHASE 3 No. OF WIRES 4 AMPS. 10 KILOWATTS 6.2 BREAKER SIZE 15
APPROVED BY ADM DATE 9/4/02 MODEL No. DR34 VOLTAGE 220/380 PHASE 3 No. OF WIRES 4 AMPS. 12 KILOWATTS 6.9 BREAKER SIZE 15
TYPE SIZE DRAWING No. S B 951903
REV. No. [1] 03–134 7/28/03

Figure 14. *240/415V, 220/380V, 3 Phase (Sheet 2 of 2)*

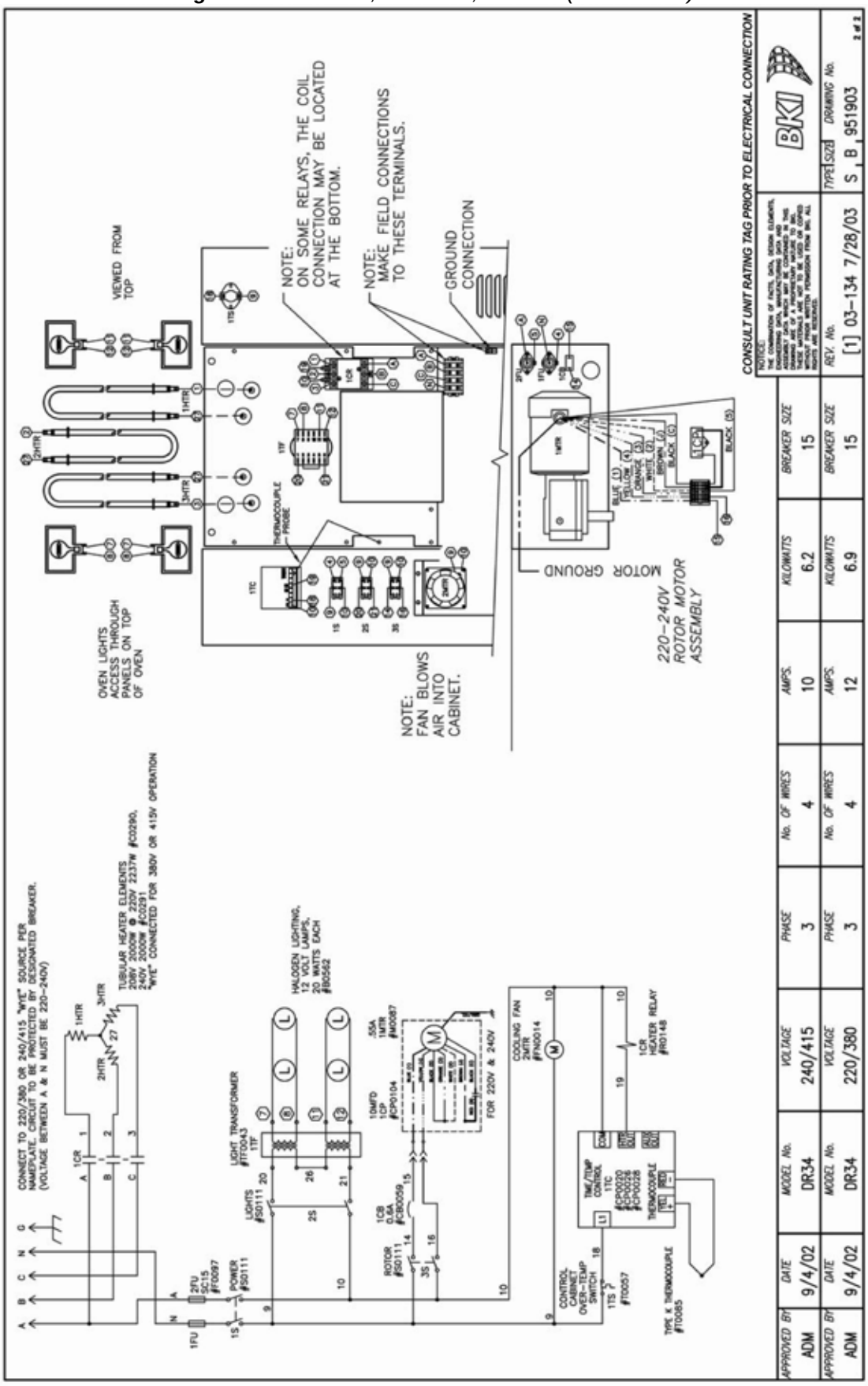


Figure 15. *220V, 240V, 208V, 1 Phase (Sheet 1 of 2)*

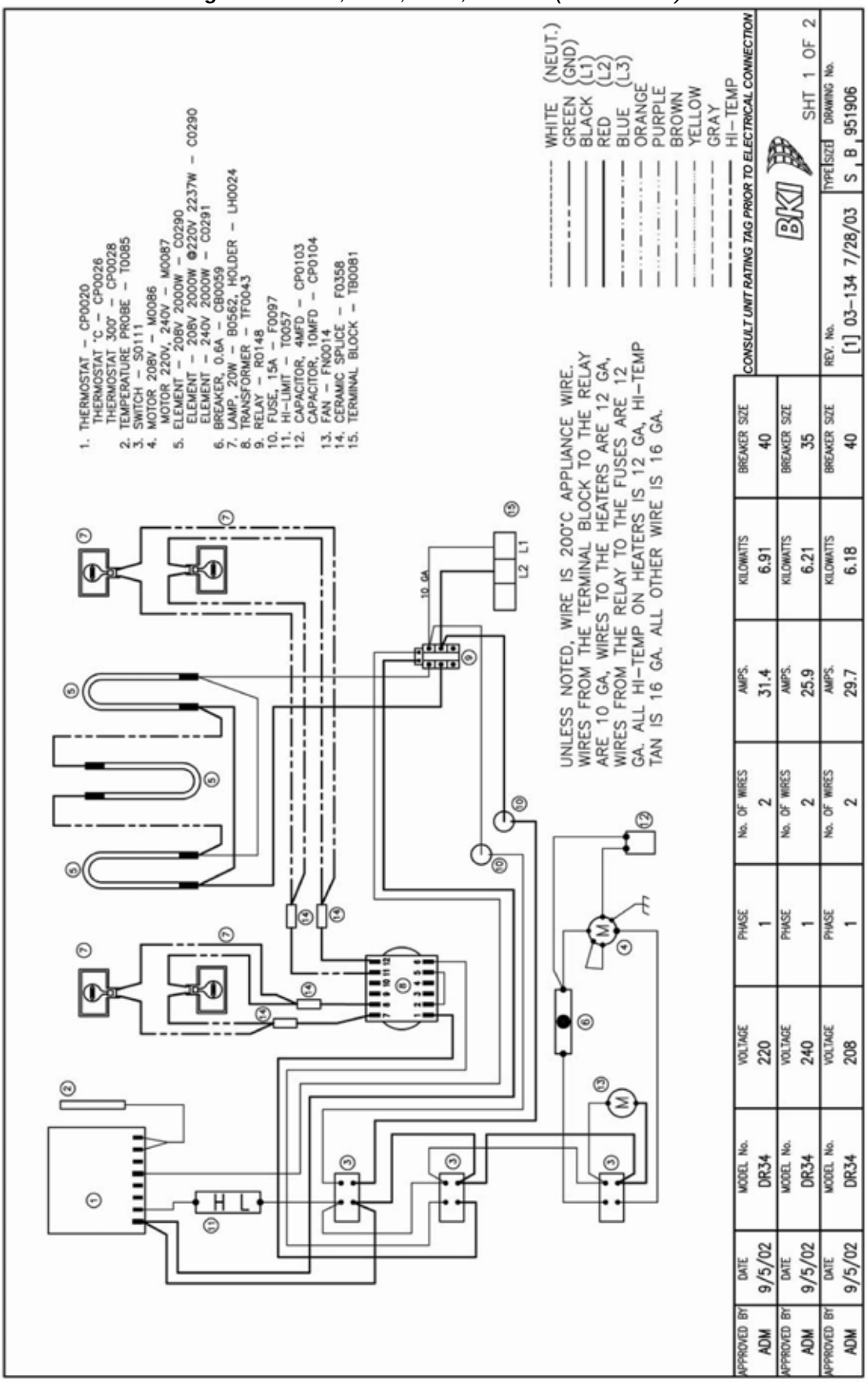

1. THERMOSTAT – CP0020
THERMOSTAT °C – CP0026
THERMOSTAT 300° – CP0028
2. TEMPERATURE PROBE – T0085
3. SWITCH – S0111
4. MOTOR 208V – M0086
MOTOR 220V, 240V – M0087
5. ELEMENT – 208V 2000W – C0290
ELEMENT – 208V 2000W @220V 2237W – C0290
ELEMENT – 240V 2000W – C0291
6. BREAKER, 0.6A – CB0059
7. LAMP, 20W – B0562, HOLDER – LH0024
8. TRANSFORMER – TF0043
9. RELAY – R0148
10. FUSE, 15A – F0097
11. HI–LIMIT – T0057
12. CAPACITOR, 4MFD – CP0103
CAPACITOR, 10MFD – CP0104
13. FAN – FN0014
14. CERAMIC SPLICE – F0358
15. TERMINAL BLOCK – TB0081
UNLESS NOTED, WIRE IS 200°C APPLIANCE WIRE.
WIRES FROM THE TERMINAL BLOCK TO THE RELAY ARE 10 GA, WIRES TO THE HEATERS ARE 12 GA, WIRES FROM THE RELAY TO THE FUSES ARE 12 GA. ALL HI–TEMP ON HEATERS IS 12 GA, HI–TEMP TAN IS 16 GA. ALL OTHER WIRE IS 16 GA.
WHITE (NEUT.)
GREEN (GND)
BLACK (L1)
RED (L2)
BLUE (L3)
ORANGE
PURPLE
BROWN
YELLOW
GRAY
HI–TEMP
10 GA
L2 L1
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
BKI
SHT 1 OF 2
APPROVED BY ADM DATE 9/5/02 MODEL No. DR34 VOLTAGE 220 PHASE 1 No. OF WIRES 2 AMPS. 31.4 KILOWATTS 6.91 BREAKER SIZE 40
APPROVED BY ADM DATE 9/5/02 MODEL No. DR34 VOLTAGE 240 PHASE 1 No. OF WIRES 2 AMPS. 25.9 KILOWATTS 6.21 BREAKER SIZE 35
APPROVED BY ADM DATE 9/5/02 MODEL No. DR34 VOLTAGE 208 PHASE 1 No. OF WIRES 2 AMPS. 29.7 KILOWATTS 6.18 BREAKER SIZE 40
REV. No. [1] 03–134 7/28/03
TYPE SIZE DRAWING No. S_B_951906

Figure 15. *220V, 240V, 208V, 1 Phase (Sheet 2 of 2)*

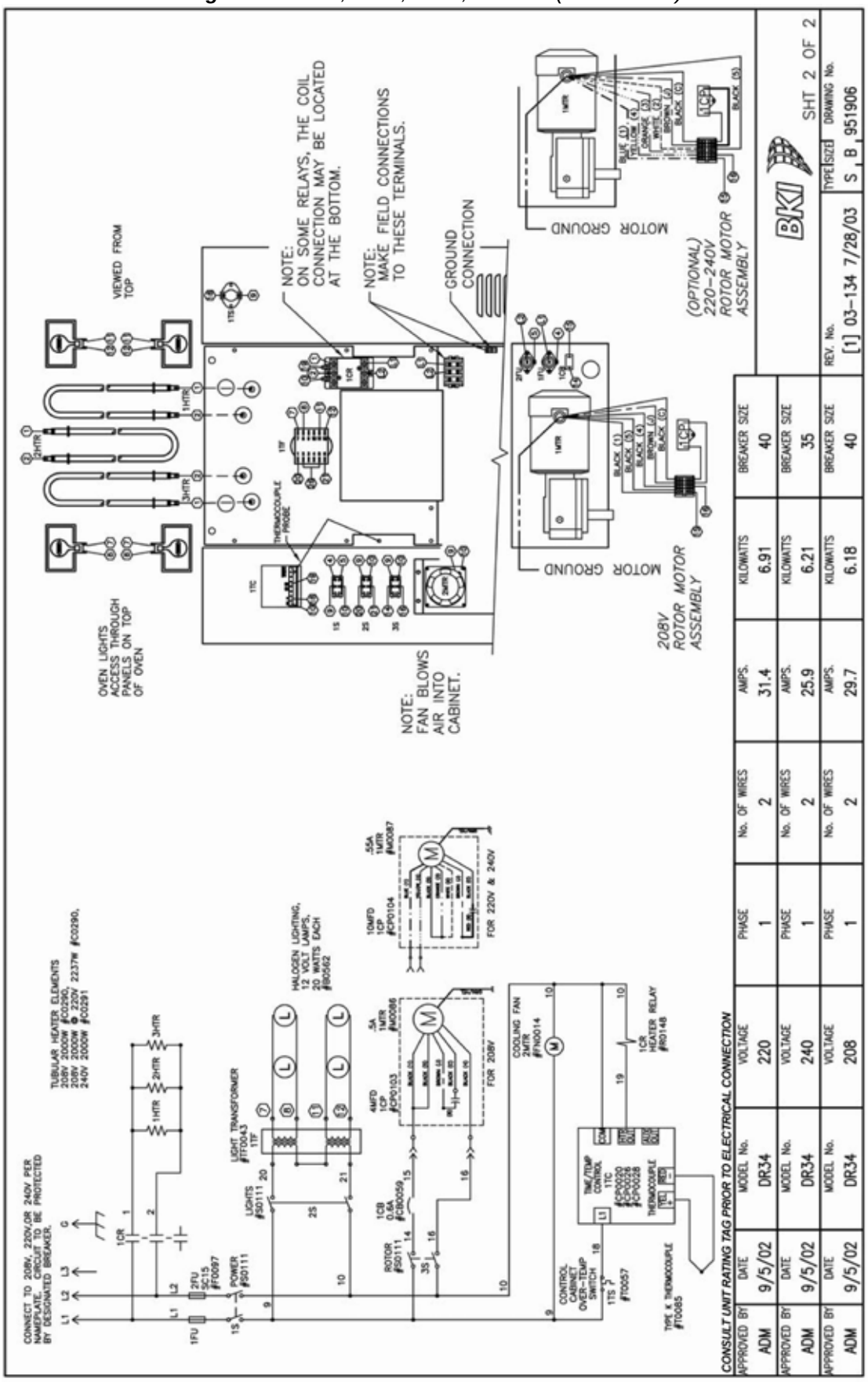

CONNECT TO 208V, 220V,OR 240V PER NAMEPLATE. CIRCUIT TO BE PROTECTED BY DESIGNATED BREAKER.
TUBULAR HEATER ELEMENTS
208V 2000W #C0290,
208V 2000W @ 220V 2237W #C0290,
240V 2000W #C0291
HALOGEN LIGHTING, 12 VOLT LAMPS, 20 WATTS EACH #B0562
LIGHT TRANSFORMER #T0043
LIGHTS #S0111
POWER #S0111
ROTOR #S0111
1CB 0.8A #C0059
4MFD 1CP #CP0103
.5A 1MTR #M0086
10MFD 1CP #CP0104
.55A 1MTR #M0087
FOR 208V
FOR 220V & 240V
COOLING FAN 2MTR #FN0014
1CR HEATER RELAY #R0148
TIME/TEMP CONTROL 1TC #CP0030 #CP0027 #CP0028
CONTROL CABINET OVER-TEMP SWITCH 1TS #T0057
TYPE K THERMOCOUPLE #T0085
VIEWED FROM TOP
OVEN LIGHTS ACCESS THROUGH PANELS ON TOP OF OVEN
NOTE: ON SOME RELAYS, THE COIL CONNECTION MAY BE LOCATED AT THE BOTTOM.
NOTE: MAKE FIELD CONNECTIONS TO THESE TERMINALS.
GROUND CONNECTION
NOTE: FAN BLOWS AIR INTO CABINET.
208V ROTOR MOTOR ASSEMBLY
(OPTIONAL) 220-240V ROTOR MOTOR ASSEMBLY
MOTOR GROUND
MOTOR GROUND
BKI
SHT 2 OF 2
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
APPROVED BY ADM | DATE 9/5/02 | MODEL No. DR34 | VOLTAGE 220 | PHASE 1 | No. OF WIRES 2 | AMPS. 31.4 | KILOWATTS 6.91 | BREAKER SIZE 40
APPROVED BY ADM | DATE 9/5/02 | MODEL No. DR34 | VOLTAGE 240 | PHASE 1 | No. OF WIRES 2 | AMPS. 25.9 | KILOWATTS 6.21 | BREAKER SIZE 35
APPROVED BY ADM | DATE 9/5/02 | MODEL No. DR34 | VOLTAGE 208 | PHASE 1 | No. OF WIRES 2 | AMPS. 29.7 | KILOWATTS 6.18 | BREAKER SIZE 40
REV. No. [1] 03-134 7/28/03
TYPE SIZE DRAWING No. S, B, 951906

Figure 16. *240/415V, 220/380V, 1 Phase (Sheet 1 of 2)*

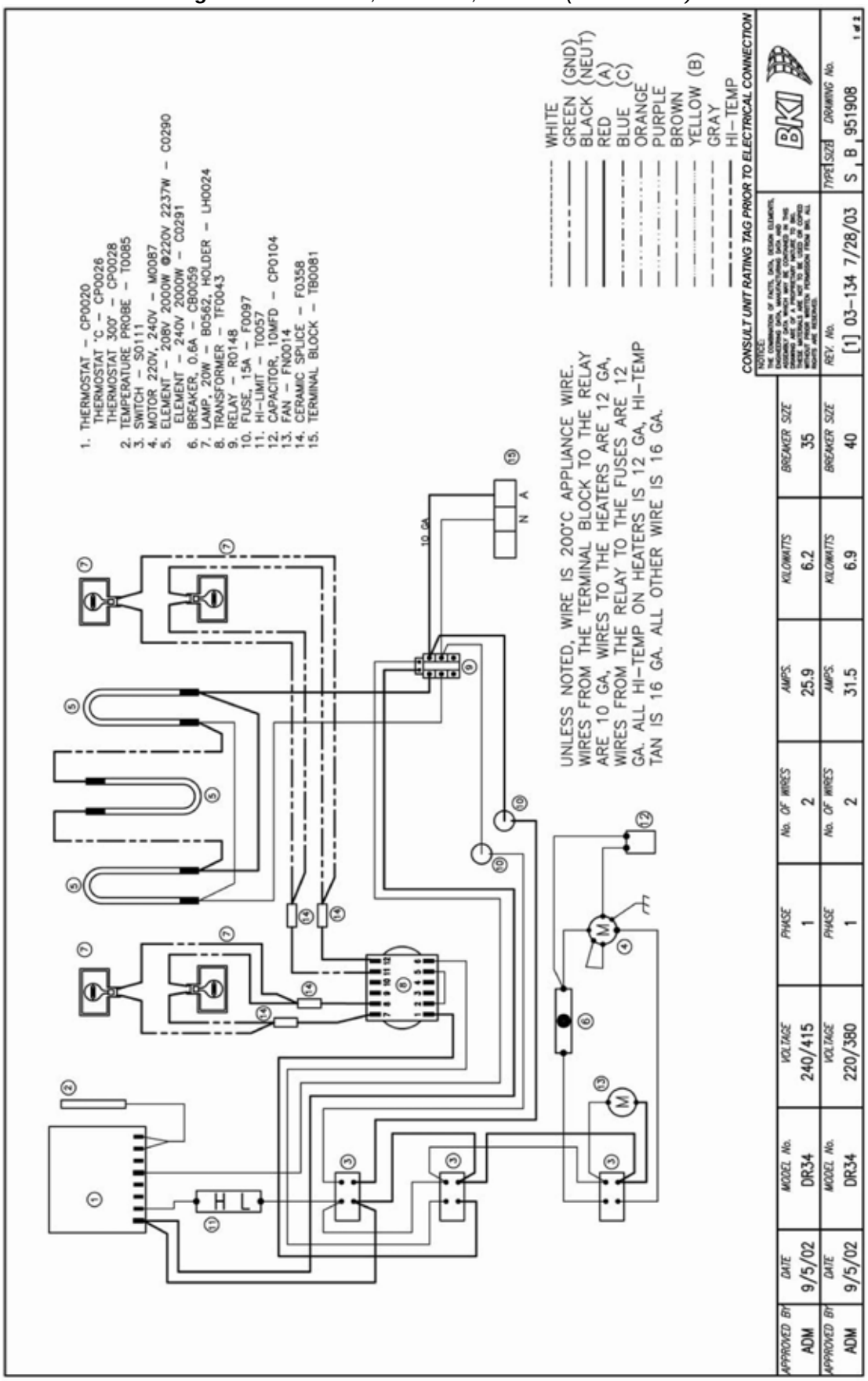
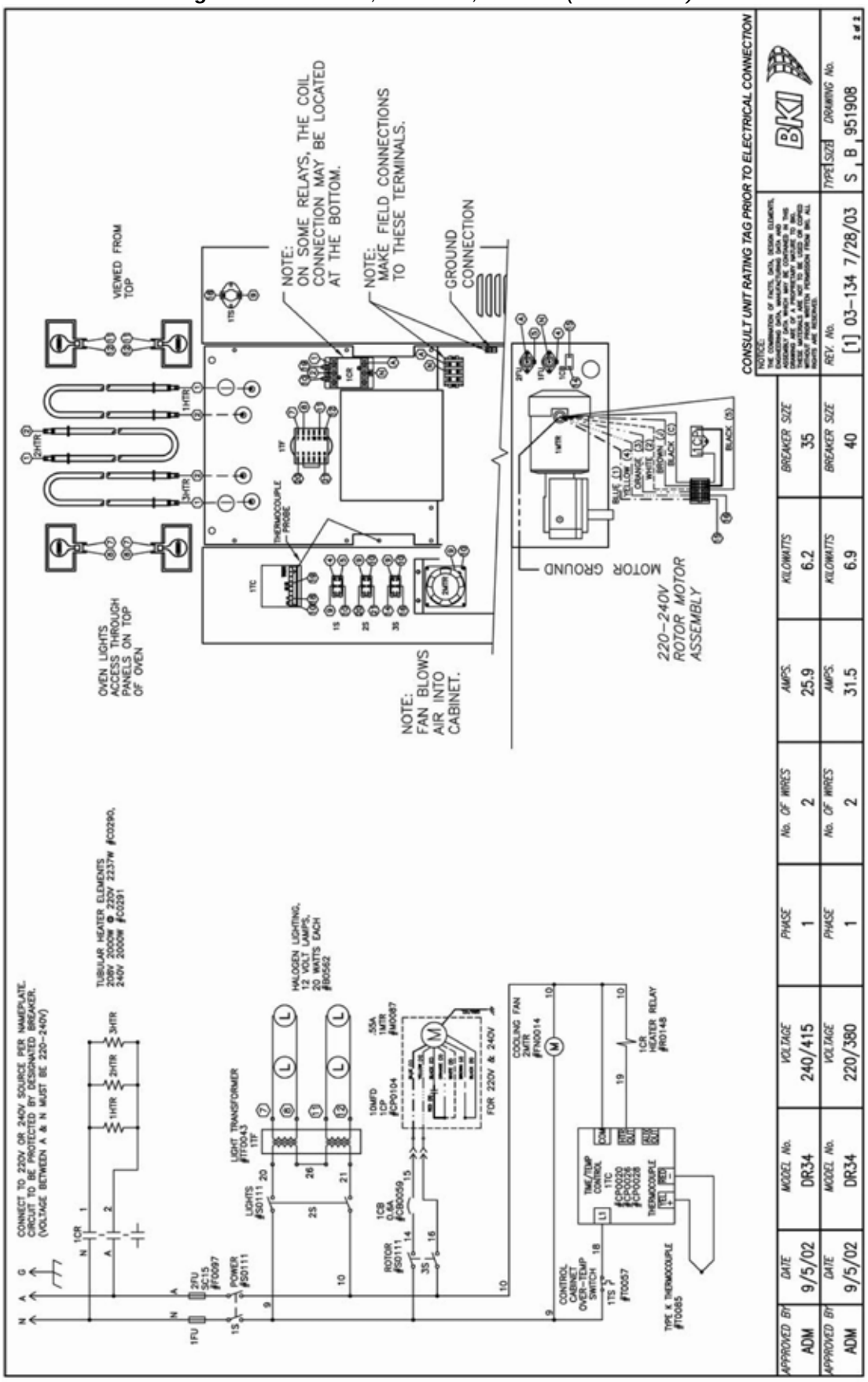

1. THERMOSTAT – CP0020
THERMOSTAT °C – CP0026
THERMOSTAT 300° – CP0028
2. TEMPERATURE PROBE – T0085
3. SWITCH – S0111
4. MOTOR 220V, 240V – M0087
5. ELEMENT – 208V 2000W @220V 2237W – C0290
ELEMENT – 240V 2000W – C0291
6. BREAKER, 0.6A – CB0059
7. LAMP, 20W – B0562, HOLDER – LH0024
8. TRANSFORMER – TF0043
9. RELAY – R0148
10. FUSE, 15A – F0097
11. HI–LIMIT – T0057
12. CAPACITOR, 10MFD – CP0104
13. FAN – FN0014
14. CERAMIC SPLICE – F0358
15. TERMINAL BLOCK – TB0081
UNLESS NOTED, WIRE IS 200°C APPLIANCE WIRE. WIRES FROM THE TERMINAL BLOCK TO THE RELAY ARE 10 GA, WIRES TO THE HEATERS ARE 12 GA, WIRES FROM THE RELAY TO THE FUSES ARE 12 GA. ALL HI–TEMP ON HEATERS IS 12 GA, HI–TEMP TAN IS 16 GA. ALL OTHER WIRE IS 16 GA.
WHITE
GREEN (GND)
BLACK (NEUT)
RED (A)
BLUE (C)
ORANGE
PURPLE
BROWN
YELLOW (B)
GRAY
HI–TEMP
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
APPROVED BY ADM DATE 9/5/02 MODEL No. DR34 VOLTAGE 240/415 PHASE 1 No. OF WIRES 2 AMPS. 25.9 KILOWATTS 6.2 BREAKER SIZE 35
APPROVED BY ADM DATE 9/5/02 MODEL No. DR34 VOLTAGE 220/380 PHASE 1 No. OF WIRES 2 AMPS. 31.5 KILOWATTS 6.9 BREAKER SIZE 40
REV. No. [1] 03–134 7/28/03
TYPE SIZE DRAWING No. S_B_951908

Figure 16. *240/415V, 220/380V, 1 Phase (Sheet 2 of 2)*


CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
NOTICE:
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BKI
REV. No. [1] 03-134 7/28/03
TYPE SIZE S B DRAWING No. 951908
BREAKER SIZE 35
KILOWATTS 6.2
AMPS. 25.9
No. OF WIRES 2
PHASE 1
VOLTAGE 240/415
MODEL No. DR34
DATE 9/5/02
APPROVED BY ADM
BREAKER SIZE 40
KILOWATTS 6.9
AMPS. 31.5
No. OF WIRES 2
PHASE 1
VOLTAGE 220/380
MODEL No. DR34
DATE 9/5/02
APPROVED BY ADM
CONNECT TO 220V OR 240V SOURCE PER NAMEPLATE. CIRCUIT TO BE PROTECTED BY DESIGNATED BREAKER. (VOLTAGE BETWEEN A & N MUST BE 220-240V)
TUBULAR HEATER ELEMENTS 208V 2000W @ 220V 2237W #C0290, 240V 2000W #C0291
HALOGEN LIGHTING, 12 VOLT LAMPS, 20 WATTS EACH #B0562
LIGHT TRANSFORMER #TF0043
COOLING FAN 2MTR #FN0014
FOR 220V & 240V
HEATER RELAY #R0146
CONTROL CABINET OVER-TEMP SWITCH #TO057
TYPE K THERMOCOUPLE #TO085
TEMP CONTROL #TC0020 #CP0026 #CP0028
THERMOCOUPLE
POWER #S0111
ROTOR #S0111
LIGHTS #S0111
1CB 0.6A #CB00059
10MFD 1CP #CP0104
.55A 1MTR #M0087
2FU SC15 #F0097
1FU
1CR
1TS
1TC
1TF
1HTR
2HTR
3HTR
1MTR
2MTR
3MTR
THERMOCOUPLE PROBE
VIEWED FROM TOP
OVEN LIGHTS ACCESS THROUGH PANELS ON TOP OF OVEN
NOTE: ON SOME RELAYS, THE COIL CONNECTION MAY BE LOCATED AT THE BOTTOM.
NOTE: MAKE FIELD CONNECTIONS TO THESE TERMINALS.
GROUND CONNECTION
NOTE: FAN BLOWS AIR INTO CABINET.
MOTOR GROUND
220-240V ROTOR MOTOR ASSEMBLY
BLUE (L1)
YELLOW (4)
ORANGE (3)
WHITE (2)
BROWN (1)
BLACK (C)
BLACK (S)

Notes

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http://www.bkideas.com

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